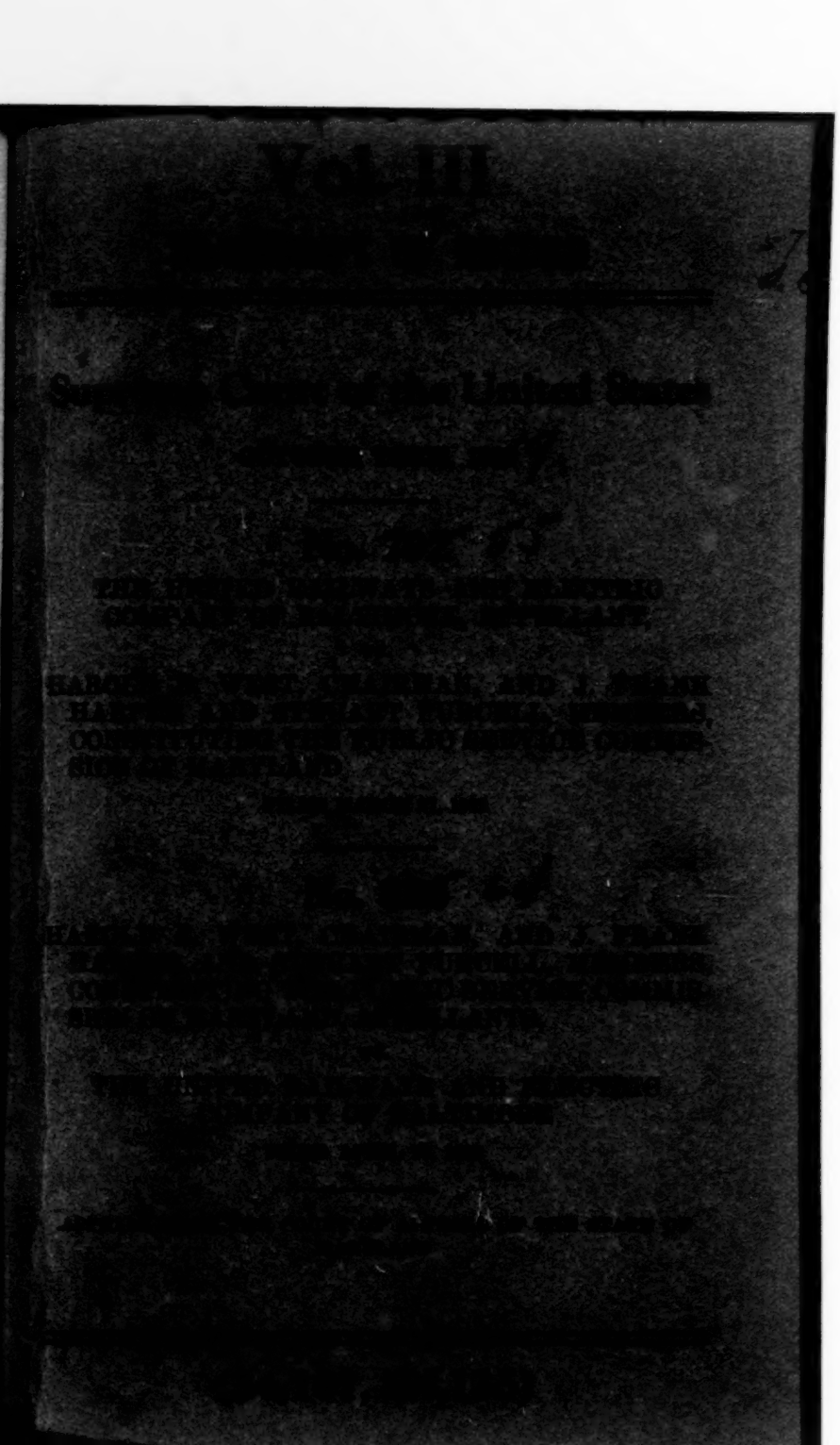

(33,773, 33,774)

SUPREME COURT OF THE UNITED STATES

OCTOBER TERM, 1928.

No. 464

THE UNITED RAILWAYS AND ELECTRIC COMPANY OF BALTIMORE, APPELLANT,

vs.

HAROLD E. WEST, CHAIRMAN, AND J. FRANK HARPER AND STEUART PURCELL, MEMBERS, CONSTITUTING THE PUBLIC SERVICE COMMISSION OF MARYLAND.

No. 465

HAROLD E. WEST, CHAIRMAN, AND J. FRANK HARPER AND STEUART PURCELL, MEMBERS, CONSTITUTING THE PUBLIC SERVICE COMMISSION OF MARYLAND, APPELLANTS,

vs.

THE UNITED RAILWAYS AND ELECTRIC COMPANY OF BALTIMORE.

APPEALS FROM THE COURT OF APPEALS OF THE STATE OF MARYLAND

VOL. III

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VOLUME III

TRANSCRIPT OF RECORD

FROM THE

CIRCUIT COURT NO. 2 OF BALTIMORE CITY

IN THE CASE OF

THE UNITED RAILWAYS AND ELECTRIC COMPANY OF BALTIMORE

VS.

HAROLD E. WEST ET AL.,

TO THE

COURT OF APPEALS OF MARYLAND.

THOMAS J. TINGLEY,
RAYMOND S. WILLIAMS,
For Appellants.

HENRY H. WATERS,
VENABLE, BAETJER & HOWARD,
HAMAN, COOK, CHESNUT & MARKELL,
JOS. C. FRANCE,
For Appellee.

EIGHTH DAY (CONTINUED.)

AFTER RECESS.

Thereupon—

C. D. EMMONS,

a witness of lawful age, produced on behalf of the applicant, having heretofore been duly sworn according to law and whose examination was suspended for the purpose of taking a recess, resumed the stand, was examined and testified as follows:

CROSS-EXAMINATION (Continued).

By Mr. Benson:

Q. Mr. Emmons, by neither the Railroad Company nor by the Commission has there been heretofore any attempt to standardize what would be a fair haul from the center of the city has there? A. Not as regards distance is concerned, no.

Q. Wouldn't it be very much better for you if a reasonable distance from the center of the city were established as the fair distance to haul for the first zone? A. If you are getting into a zoning I would say no, because of the difficulty of fare collections.

Q. How can you then comply with the law, and I am going to read it again to you, because you understand it, I am not asking you to differentiate or tell me the different kinds of prejudices or disadvantages, but the law says that no common carrier shall subject any particular person or corporation or locality or any particular description of traffic to any prejudice, not to any particular kind, but to any prejudice or disadvantage in any respect whatsoever. How can you avoid any prejudice to a locality or a community if you don't establish some basis for what is a reasonable haud.

Q. Well, that's a very difficult question, but if you are going to take the length of haul as the measure, you can complicate it so that it becomes an absolutely not only

impossibility but an absurdity if you would try to measure by blocks or by half miles or something like that; if you are going to Union Station one thing, out to Guilford another, or out to Roland Park another, that gets to a position where it makes it an impossibility to make the fare.

(The Chairman) What law was that?

(Mr. Benson) That's the Public Service Commission law. I am quoting the exact language of the law.

(Mr. Markell) Of course prejudices doesn't mean any mathematical inequality. It means unfair discrimination. It's a pure question of law that he is asking the witness.

Q. Do you think there is no prejudice or disadvantage or unfair discrimination for haul on the Pikesville line from Turnpike to the center of the city, eleven and seven-eight miles for two fares of the same value and to haul to haul to Halethorpe six and a quarter miles for two fares of the same value? A. Well, Senator, it seems to me that you have just of course given the utmost of what is the apparent discrimination.

Q. I ask you to answer that question? A. All right. Yes, if you want me to say yes. If you go out the Turnpike, yes, but you come this side of Turnpike and its quite different. You go to the very extreme limit of the second fare zone, and the longest line we have.

Q. The Turnpike is unfair discrimination, isn't it? A. No, it isn't unfair discrimination. It's a question of how these fare zones have been built up.

Q. It's not unfair to haul people 11 and 7/8 miles for the same fare you haul 6 and 1/4 miles, other conditions being the same? A. It's a practical matter. Where can you stop in that sort of thing. Of course, you are hauling them longer on that line than you are hauling them on Halethorpe.

Q. Don't you know as a matter of fact that this law was taken from the Inter-State Commerce law and that that would be considered a discrimination and has always been considered a discrimination?

(Mr. Markell) Nothing of the kind.

(Mr. Howard) Nothing of the kind.

(Mr. Benson) It isn't discrimination to haul twice as far for the same money?

(Mr. Markell) Of course it isn't.

(Mr. Howard) The very fare zone shows that. One man may go three blocks and the other man may go a mile.

Q. Then you don't know that is discrimination? A. It seems to me the entire circumstances must be apparent to the Commission.

Q. Now please explain to the Commission what circumstances there are on the Reisterstown Road that will justify you to haul people 11⅞ miles and hauling them out to Halethorpe for 6¼ miles for the same money? A. The only circumstance is that the city fare takes you to the city limits. Then you have to have a fare outside of the city limits for the first zone. Now you have taken the extreme limit of the first zone on the Emory Grove line.

Q. And the extreme limit on the Halethorpe line? A. Yes. Now you come into Pikesville and you are not as far out beyond the city limits as you are at Halethorpe, so it seems to me its just a matter of practical use.

Q. Now explain to me why and when, if that's the idea, that the city limits give you any right to charge people by the city limits? A. I think in the previous case, and I think I have always testified the city limits seems to be the limit of the first fare, which gives you the advantage of every line in the city by use of transfers. If you only ride a block its one fare. If you only ride from one corner of the city to another, its one fare. That's the American method of street railway fares.

Q. Now, Mr. Emmons, you know the city limits was not extended as far out in the direction of Halethorpe as it was in other sections of the city? A. There is a slice there that keeps Halethorpe out in the county.

Q. Suppose there had been no extension out there? A. How do you mean no extension?

Q. In that direction. Suppose there had been no extension in that direction, would you have still said that with the city limits way back there it was at Union Avenue that you should have made that the limit of your first fare zone? A. I think it would have still been true, Senator.

Q. No matter if it were only a half a mile in the city? A. May have been only two blocks. I think the city limits would have been the ruling point.

Q. But now in special favored cases, you violated that, like Dundalk? A. The Dundalk line is very different from the Halethorpe line. Our Sparrows Point line has always been a profitable line.

Q. And the Lorraine Cemetery line? A. That certainly is not profitable.

Q. But you violated it in that case? A. I say to equalize it, put something on the Lorraine line.

Q. If there is anything to be equalized then there has been a preference? A. No.

Q. Will you tell me whether there has been or not a preference to the citizens around Lorraine Cemetery? A. The Lorraine Cemetery people are about a half a mile beyond the city limits, and the Halethorpe people are about two miles beyond the city limits. Now there is someplace that the line has to be drawn.

Q. And you voluntarily took over this line for nothing and extended 2.36 miles while part of it in the city true, for one fare, didn't you? A. We took it over, yes.

Q. And for one fare? A. Yes.

Q. And you agreed to do it? A. We had the line given to us for that purpose.

Q. And because you got it for nothing you are giving these people that preference? A. That isn't the reason we give the people that preference, but just because there is not in our judgment a sufficient amount of line

outside of the city limits to put another fare on. There must be some limit.

Q. How about the Woodlawn line? A. It's about the same thing as Lorraine.

Q. It's a mile, isn't it? A. No, it doesn't look half a mile here.

Q. Isn't it a mile? A. I don't think it is. No, I am quite sure it isn't. It's not over half a mile.

Q. Beyond the city limits? A. Yes.

Q. Now before the city was extended how far did your fare go on the Woodlawn line, single fare? A. Gwynn Oak Junction. I think it was Gwynn Oak Junction. That was beyond the old city limits.

Q. That was beyond the old city limits? A. Yes.

Q. That extended beyond the old city limits before the city limits were extended, didn't it? A. Yes.

Q. I am talking about the Woodlawn line beyond the city line? A. At the present time?

Q. Yes? A. About a half a mile.

Q. Only half a mile? A. That's the way it looks on the map here.

Q. I thought you told me Woodlawn was a mile beyond Gwynn Oak? A. I didn't say Gwynn Oak Park. From Gwynn Oak Junction it's more than a mile.

Q. How far is it beyond Gwynn Oak Park? A. About half a mile.

Q. Didn't you say a mile this morning? A. The way I put it I think was half a mile or a mile. I didn't know exactly what the distance was. I think I said half a mile or a mile, Senator.

Q. Well now, the eleven lines shown on our Exhibit B, which was filed in the other case, which you have a copy of, shows an average excess of 57% more mileage on those lines for one fare than there is on the Halethorpe line for one fare? A. I think that's right. You

measure the route of the line rather than from the center of the city.

Q. No, I measure from the center of the city? A. Yes, but you follow the route of the car.

Q. Yes. And the average excess of the eleven lines shows that they get 10% average excess haul more on those lines than the Halethorpe line does for two? A. I haven't checked it, but I presume that's correct.

Q. And still you think that there was no prejudice or disadvantage, no disadvantage to the people of Halethorpe in that condition whatsoever? A. I say that there is no prejudice particularly against them. There might be some disadvantage like there is a disadvantage to the people living out Frederick Road and Edmondson Ave. where there are two fares.

Q. You know Frederick Road and Edmondson Avenue all go further from the center of the city on one fare? A. well, would it make any difference to you whether this line went on down to Washington for instance?

Q. Not a particle, but the fare would make a difference if you charged me for the distance to Washington to Halethorpe. A. But suppose you went a mile further and you were still in the one fare zone.

Q. There is no relation whatsoever between the shortness of the city haul and the shortness of the county haul? A. Not to my mind, no.

Q. I congratulate you. Now will you explain to me any reason why the people of Lakeside should have the privilege of riding 7¼ miles for one fare as against Halethorpe's 6¼ miles for two fares? A. The people of Lakeside are about one-third of a mile beyond the city limits. The people of Halethorpe are two miles beyond the city limits.

Q. Then it all should be with reference to the city limits? A. I have said so very often.

Q. Now why do you give Dundalk Junction a mile and a half? Why shouldn't you give Pikesville one fare if you are measuring from the city limits? A. That is a

condition I explained this morning. It's also on a paying line.

Q. Why shouldn't you, if you give Dundalk a mile and a half beyond the city limits, why shouldn't you give Pikesville a mile and a half beyond the city limits for one fare? A. I can hear you and I will try to explain it again. At Dundalk Junction there are two lines cut together. Riverview Park is on one line, Dundalk is on the other, and if the Dundalk people could not get a transfer there they would have to ride to 15th Street to get a transfer and it was more for the convenience of those people to keep them from riding around what we would say a Robin Hood.

Q. And the people of Dundalk get that advantage? A. They do, yes.

Q. Why don't you give the same advantage to the people of Pikesville? You extend a mile to Woodlawn beyond the city or half a mile as you say. Why don't you extend half a mile across to Pikesville? A. Now Senator it seems to me if there is any question about the extensions beyond the city limits at all, the real answer is the definite cutting off of the fare beyond the city limits and charging these other people then an extra fare.

Q. If that's why you don't extend to Pikesville that half a mile—— A. I say they are different situations and we cannot keep on extending beyond the city limits. We cannot do it.

(The Chairman) I might say for Senator Benson's information, something that Mr. Emmons is loathe to say; that that extension to Dundalk Junction was ordered by the Commission in the 7½c fare case.

(Mr. Markell) The Dundalk extension is vastly different from almost all these others in that there is some money it it.

Q. Mr. Emmons I notice on one of your exhibits that you have a special rate from Highlandtown to Sparrows Point. What is that rate? A. That's the Bethlehem Steel ticket. Its two five-cent tickets.

Q. That's a special arrangement? A. Special rate to the Bethlehem Steel.

Q. For the benefit of Sparrows Point? A. For the benefit of the workers in Sparrows Point.

Q. Now Mr. Emmons, you have made the statement several times that one way of handling this thing is to cut down zones, haven't you? A. Cut down zones.

Q. Yes? A. I did say that at one time that we had in mind using the city limits always, as the measure of the first fare, always as the measure of the first fare.

Q. That's just one thing I want to ask you about. What has Baltimore County done to the United Railways that makes you want to discriminate against it when it it the same distance from the center of the city in the county as it is in the city? A. Not a thing.

Q. They haven't overtaxed you, have they? A. Not a thing.

Q. You don't have to pay any Park Tax out there, do you? A. No, it's not in the city.

Q. Your running conditions are better at Halethorpe, because you have private right of way? A. Yes. We still lose money, even with the private right of way.

Q. Is that the only line you lose money on? A. No.

Q. If you were you wouldn't be here A. No.

(Mr. Markell) It certainly is not business to lose money on it.

Q. How about the other end of the line. Isn't that one of the most profitable lines? A. Since the change of the routing to the No. 3.

Q. Yes? A. We did put it on a good line, yes.

Q. And largely because it met with the Halethorpe line? A. Oh, no.

Q. It don't bring carloads full to the Halethorpe Terminal? A. It did during the Fair of the Iron Horse, but it does not now.

Q. Mornings and evenings? A. We wouldn't be showing a loss then.

Q. You mean to say those cars are not well filled? A. There may be some couple of trips, but you take all day long and you will see it's a very sparsely line.

Q. Worse than any of your city lines? A. Worse than any of our city lines, yes. When you asked me about lines that didn't pay, I thought you meant county lines.

Q. How about our friend Mr. Clark's line? How does it compare with that? A. That's a poor brother.

Q. Now why is it you want to favor Mr. Clark? Is it because he is better looking or anything of the kind? A. That may be the reason, but I think not.

Q. But you have favored him, haven't you? A. No, not particularly.

Q. You don't think you have? A. No.

Q. You are not sincere in that statement? A. Yes, I am, because I have in mind the city limits all the time.

Q. But you didn't have to take the line over at all? A. If you had been in my place, for several years, I think you would have taken it over too. That's about all I can say.

(The Chairman) I will say this for Senator Benson's benefit also, a matter that Mr. Emmons doesn't care to go into, that line was taken over largely upon the insistence of this Commission.

(Mr. Benson) Mr. Chairman, I am in earnest in this case as I guess you will realize. If I have been to abrupt to Mr. Emmons of holding him responsible for conditions here I would like to apologize to him, but I want to say to the Commission right now that I am in this case not for what Mr. Emmons has done wrong, but I am in this case to have the Commission remedy what they have done and give us what we are entitled to in my judgment under the law, and that is that no preference shall be given either by Mr. Emmons or this Commission, and the fact that this Commission insisted upon the extension

to Dundalk, if that is permitted to stand, then we contend that we are legally entitled to one fare to Halethorpe.

Now, I just want to make myself clear on this point. It isn't intended as any reflection upon Mr. Emmons or any reflection upon the Commission, but I do want to call attention to just what I am trying to bring out, and that is there has been no scientific method. We have gone first one place under pressure as you just admitted, under pressure whether by the Commission or Mr. Clark or who, you took over a railroad that was not paying and extended it two miles and thirty-two one hundredths, but that puts the Halethorpe communities at that disadvantage just the same.

(Mr. Markell) There is no scientific method.

(Mr. Benson) Maybe not, but I think there will be one a whole lot closer to scientific than——

(Mr. Markell) There won't be any extension to an unprofitable line because the Commission extended a profitable one to Dundalk. No Court on earth will extend any such line as that.

Q. Now, Mr. Emmons, just one more thing for the record. The Halethorpe Line has the short haul from the center of the city for one fare and the shortest line in the county, with the exception of one line, isn't that correct, on its second fare zone and that the Taylor Avenue line? A. The statement looks correct as to inside the city. Now will you ask me the other.

Q. Outside the city I say the only line that has the shortest haul on its second fare is the No. 19 line? A. You mean in total length?

Q. No, the total second fare haul. A. Of course, yours goes to the end of your line. The Harford Road line is 1.71 as against your 1.94 going to the end of the line.

Q. What is the Harford Road line? A. 1.71 to Carney on the second fare. Towson is 2.15, just about the same. Not much difference.

Q. I have two and one-eighth. A. That's about right.

Those three lines are just about the same as far as second zones are concerned.

Q. But all of them have the first zone longer? A. The other two have the first zone longer.

Q. Every other line out of Baltimore? A. That's right.

Q. Materially longer? A. Well not materially longer.

Q. Well the Halethorpe line is four and three-eighths miles about from the center of the city? A. You don't measure from the center of the City. We do.

Q. I am measuring from the only center that we can get to. A. If you measure from the real center of the City it makes a difference. If you go out to where the No. 3 line turns off that's Baltimore and Howard.

Q. That's as close to the center as I can get to the line. A. Howard to Charles is quite a distance.

Q. But I have taken all the other lines the same way. Some Baltimore and Calvert Street and some Saratoga and Howard? A. If you take Baltimore and Charles as the center, as we have, you will find that the Middle River and Dundalk lines and the Frederick Road and Edmondson Avenue lines are not much longer. They are a little bit longer, but not much longer than your line.

Q. The Middle River line we took at Fayette and Holliday Streets. A. I know, but if you take from Baltimore and Charles, according to this it is——

Q. Holliday Street is further east than you are taking it from. A. You have taken the route and I am taking the concentric circles here. Your measurements are probably more correct than mine are here.

Q. Thank you for that much. That's all.

(Examination concluded.)

(Mr. Newman Lowenberg) Can I ask Mr. Emmons a few personal questions?

(The Chairman) No, sir, you can not. The public is

represented by Mr. Tingley and Mr. Clark and Mr. Toole and by the Assistant City Solicitor. Any questions that you may have that you wish to have asked you could have submitted to those gentlemen, and if any one of them chose to ask the questions they would have done it. We have decided to limit the examination of witnesses only to the attorneys in the case.

(Mr. Lowenberg) Mr. Chairman, in fact I have a letter which I received from the United Railways, and I don't think the information I have received has ever come up, and that is why I would like to ask a few questions and that is why I came here for that purpose.

(The Chairman) If it is a matter which the attorneys representing the people thought was a proper matter to bring before the Commission they would have brought it. We regret that we can't permit any indiscriminate questioning of witnesses.

(Mr. Lowenberg) Mr. Chairman I want to apologize to you, but as a citizen I think I ought to be entitled to ask a few questions.

(The Chairman) The citizens are represented by Mr. Tingley as a whole.

Thereupon—

BANCROFT HILL,

a witness of lawful age, produced on behalf of the Applicant, having first been duly sworn according to law was examined and testified as follows:

DIRECT EXAMINATION

By Mr. Howard:

Q. Mr. Hill, would you tell the Commission who you are and what your occupation is and has been? A. I am a graduate of the Massachusetts Institute of Technology. I have served five years as President of the Harbor Board of Baltimore, as Harbor Engineer, four years as Engineer of the Port Development Commission, I have been Consulting Engineer and Valuation Engineer for the United Railways for the last three and a half years.

Q. I believe you testified in the Valuation Case the record of which has been made a part of the record in this case, didn't you? A. I did, sir.

(Mr. Tingley) In the course of that case didn't you admit that you were not an expert?

(The Witness) I claimed it, sir. I didn't admit it. I claimed it.

Q. Mr. Hill I want to first ask you about an exhibit that was filed by Mr. Emmons by which he brought up to date the valuation of $70,000,000 that was fixed by the Commission, including the $7,000,000 of easements which is as yet undetermined, and he said that you had worked on that exhibit? A. I did.

Q. What is the number of that exhibit? A. Exhibit No. 23.

Q. Have you got it before you? A. I have.

Q. Is there anything in addition to what Mr. Emmons said that you would like to add to his explanation of how that was made up? A. No, simply to state very generally how it was done. In the first place as a general principal we took out of the valuation in 1924 all of the things which had disappeared through any cause whatever that we knew of at the prices of the valuation. That was done by, in case of track, for instance, by finding three typical sections of track, paved City tangent track, unpaved City track, and by tangent I mean straight track, and by tangent open track in the country such as out on Reisterstown Road, and in finding the amounts of those that had been withdrawn, and taking them away from the valuation. To do that we reduced our prices, which were the only detailed prices we had available in many cases, by the percentage which the Commission's whole value given us in any one account bore to what we had claimed. In other words, if we claimed a dollar and the Commission gave us 95 cents we reduced any unit in that dollar by 5%.

Then we had to figure the special work retirements. The special work, each one of them has to be figured separately because special work is just what its name implies, it is a special layout in any situation, and we

had figured the track that had gone out through abandonment by the same method, and we had the Power Department figure at their prices, the various elements in the valuation which had gone out such as overhead work, underground conduits, new substation equipment and that sort of thing, and cars were treated in the same way. The cars that had gone out were taken out at the valuation prices. The equipment that had gone out was taken out at the valuation prices, and also about $30,000 worth of more or less small things that were on the books as having gone out which were not charged to any account, such as 13 horses in 1924. We just simply took them out, all of those things in one list.

Then that took from the valuation those things which had been retired. They were taken out at 100% of their value as the Commission gave it to us. They were not taken out at 85% which of course would have increased our valuation today; they were taken out at 100%. They were then, to make up the valuation, we believed the most satisfactory thing to do was to take the actual cash cost without any overhead whatever that the Company's books showed for new construction out of depreciation or out of new capital, because under the theory that the Company's books were kept of course these things were made good about half and half, and we checked the result of the million dollars also very closely by finding out what had actually been added to the plant. For instance, there were four automatic substations which cost altogether, land, buildings, and equipment, about $600,000, and there is a very steady increase in track. The track that goes in was heavier than the track that came out, and by that we get a fair check on what we had done and that is how it was done.

Q. Then to see if I understand it right this exhibit is not based on your book entries of retirements and new acquisitions? A. No, it is based not on book entries, but also anything that got on the books, which by any chance we didn't have in the valuation, those few small things were put in.

Q. What I want to make clear though is this; that your retirements here are all taken off on the basis of the Commission's valuation? A. They are.

Q. And not on the cost basis? A. That's right.

Q. And does that change work against the Company or in favor of the Company if we consider that preserving a high valuation is in favor of the Company? A. It works against the Company.

Q. And then in the second place all of those items that you took off, you took off not at the 85% depreciation value that the Commission had put on them but at the 100% 1924 value? A. 100% value, yes, sir.

Q. And that also worked against the Company? A. It did.

Q. And then again you, in adding new property, there has been more new property added than has been property gone out? A. There has.

Q. You eliminated in both cases the overhead? A. I did.

Q. So when property goes out you didn't consider any proportion of the general overhead going out with it and the property that came in you didn't count the overhead? A. I did not.

Q. And all of that makes a difference of about how much in the net increase in value as shown by this exhibit and the exhibits which were used in the emergency hearing which I believe were based on that method in which these transactions had been booked? A. I can give you my part of that. We have an addition under this method of $1,005,270.00.

(Mr. Markell) The exhibit shows two and a half million.

Q. So this exhibit is your work mainly? A. That exhibit is my work.

Q. And your object has been to fairly bring up to the present date what you understand to be the January 1, 1924 value? A. It is.

Q. I think some comment was made in the cross-examination of Mr. Emmons about allowances for further accrued depreciation since January 1, 1924. Would you

explain to the Commission whether there is any occasion for that? A. We did take out of the valuation of 1924 all of the obsolete property we had at that time; whether we had it on the books or not it made no difference. There were, as I remember, about three million dollars worth of cars that were not presented at all at present day value. There was $300,000 worth of track taken out after the schedules had been checked and the inventory was in. It was considered by the Commission, at least it was conceded by us at the time, that that track was not being used, was obsolete, and was taken out. About $300,000 of it.

(Commissioner Harper) And not included in the $70,000,000 valuation?

(The Witness) No sir, it's not in there. The cars were not. There were other things. Bay Shore Power House for instance. We tried to present only the live stuff that we had and I don't think we got anything in that wasn't.

Now the rest of the property has been maintained by this maintenance. We still have it. We still have it in certainly as good operating condition as we had it then.

Q. It's been fed with new material too hasn't it? A. It has been fed in with this million five construction of new material, without any overheads on it.

Q. So is or is not the present condition of the property, so far as any accrued depreciation is concerned, as good as it was as of the date of the Commission's valuation? A. I would say it was sir.

Q. Now Mr. Hill you said that you were a valuation engineer for the United, is that right? A. Yes, sir.

Q. Have you made a special study of the question of what would be a proper retirement allowance for the United Railways and Electric Company, that is to say, an allowance intended in the long run to replace property that in one form or another is either used up or become obsolete in the public service and has to be retired? Have you made any calculations showing from the experience of the Company or otherwise what is or what ought to be a proper annual allowance for that pur-

pose? A. I have. I have made an analysis based on the Company's experience, experience of the Company's department heads——

Q. Before you come to the details of it let me ask you this. What is the figure that you find would be a proper annual allowance for that purpose? A. About $2,200,000.

Q. Now will you in your own way explain to the Commission how your work was done by which you ascertained from the Company's records what approximately ought to be the allowance for that? First of all you gave a copy of your report on the subject this morning to Mr. Tingley, didn't you? A. I did this morning, yes.

(Mr. Howard) I think you better file a copy with the Stenographer.

NOTE: Report above referred to is here filed in evidence and marked Applicant's Exhibit No. 25.

Q. Now Mr. Hill what was the object you set before yourself in this investigation and how did you try to arrive at it? A. I have endeavored by analysis of the Company's history, as far as it was available, and by any other information which I could get of similar character, to arrive at that sum of money which under present day conditions would maintain the plant as valued by the Commission and any additions thereto that might be made from time to time, simply to keep what we already had, not to build up any reserve except that we know that retirements in all classes of property of this kind will vary a little from one year to another although being fairly constant over a long term of years. I had in mind no other reserve, and it is not attempted to build up any reserve of that kind. It is attempted to arrive at that sum of money which over a period of time will take care of the replacements of the property at the present day prices.

Q. Now that was your object then; to ascertain that amount? A. Yes, sir.

Q. Now tell the Commission how you went about it and what were the considerations that you kept in view? A. There were three methods of arriving at this result, all

of which fairly well check each other. In the first place, and one of the best is the general history of transportation in this City. If we stand today, we got a plant that is performing its functions we think 100%, certainly it's performing all of them of any necessity as far as the plant itself is concerned, if we stand today and look forward we don't see any changes to amount to anything in that plant. The cars are well maintained. The track is being kept up, and we could go on perhaps forever with what we have, but if we look back we find three very distinct systems in transportation that have come up and passed away through obsolescence alone. You had about 32 years of the horse car system which in its days was the only thing known and was supposed to last forever by the people of that day apparently since they set aside at that time nothing to take care of it when it was gone. You have that supplanted by the cable system. When the cable system was first opened in this City the people that put it in hailed it as the greatest benefactor to the City that had been known for a long time, even all the newspapers blowing and praising them. The first cable car that was delivered had three oil lamps. They were very particularly praised because they had three oil lamps in them, and the system is probably the most expensive, relatively, of any of the three that was put in.

We have that supplanted by the old hand brake single truck open and closed car, sometimes double truck, but the double truck open car has gone long ago, operating on cobble streets, dirt ballasted, tram girder rail, rail that was particularly built to carry horse drawn vehicles across cobble stones. That also has almost entirely gone. It's a very interesting thing that in the valuation 10 per cent. of the City tangent track, straight track, was an old dirt ballasted tram girder rail. In the three years that have passed, out of the retirements, 40 per cent. were track retirements, that showed a change due to obsolecence of about 5 per cent. a year. If you had ever set up such a charge——

Q. That would just be obsolescence alone? A. Obsolescence alone.

Q. From that quarter? A. And it's obsolescence alone

of the depreciable property. In some cases it's obsolescence of more than the depreciable property.

Now with that you have 3 per cent., 14 per cent. and 5 per cent., and it would seem——

(Mr. Clark) What do you mean by that?

(The Witness) Rates of retirement. You had 32 years, which gives you about 3 per cent. of obsolescence if you consider obsolescence going on at an even rate.

(Mr. Clark) But you said 5 per cent. obsolescence and then you said 3 per cent. and 14 per cent. What are they?

(The Witness) 3 per cent. for the original horse cars, 14 per cent. for the cable road, the most expensive of the crowd, and 5 per cent. for the old hand brake car on tram girder dirt ballasted track with steam power and steam substation. The old Pratt Street Substation has gone out. Not a thing in the valuation for it. A lot of steam substations are all gone. Only one of them exists and that is this old one out at Emory Grove.

Q. You divided the history into those stages? A. If you add them up Mr. Clark you get an average rate of about 7½ per cent. I would say that 5 per cent. would certainly be justified by that history.

(Mr. Clark) Then that 5 per cent. is used as an average from these other figures?

(The Witness) That's right.

(Mr. Markell) Average of averages.

(The Witness) And that's absolute history. If you are going to say anything about that you are going to say that you stand today in a position that nobody stood in before; that we will never have another change. Although we don't see it, they didn't see it then, they certainly didn't come down and build those cable roads and within seven years run them out of town, the very people that praised them as being the saviors of the City were the very people that wanted to run them out. Then that was one phase of the situation. That's one method of getting at a general figure for replacements. I should say that that would justify at least 5 per cent.

Q. That's obsolescence alone, too? A. That's obsolescence alone, and obsolescence is a very large part of this thing. It occurs almost instantaneously in many cases, but that's no reason for not trying to provide for something for it.

Now from that I pass to a consideration of the individual items of property such as track to start with. In track there are seven accounts. They start with grading and they end up with paving.

Q. How important a part of the total depreciable property is track? A. Track represents about 40 per cent. It represents about $20,000,000 in $53,000,000.

NOTE: The Commission then adjourned for the purpose of taking a short recess.

AFTER SHORT RECESS.

DIRECT EXAMINATION.
(Continued).

By Mr. Howard:

Q. So one special subject of your investigation was this of track? A. Yes, sir.

Q. Will you proceed and tell the Commission what you did and what you found?

(Mr. Clark) May I interrupt you one minute? You spoke of three methods of getting at the amount that you need, and one was obsolescence. Now you are going to start the second one?

(The Witness) One was entirely obsolescense. One was to consider the history of the business as a whole, transportation as a whole. I finished that. Now I am starting to take the individual units that go to make up this property and give you what history we have in the last few years running from eight or nine to twenty or thirty as the facts were available.

(Mr. Clark) In other words, depreciation.

(The Witness) Mr. Clark, most of it is obsolescence. It surprised me when I went into it.

Q. And in order to anticipate and also to gratify Mr. Clark the third method will be what? A. The third method will be to see what general companies we can get the data on, and it's rather hard to get because their methods differ from one another, that substantiate that same figure of from four to five per cent.

Now if you gentlemen will turn to page 4 in this report of mine to Mr. Emmons you will find there a list or the first part of a list of abandonded track that's been abandoned and removed.

Q. Over what period? A. In the last nine years with the single feet of track on it. Page 5 is a continuation of it. There is twenty miles and thirty-one hundredths of track that's been abandoned in nine years time and removed. That will be at the rate of about 2¼ miles a year.

It may occur to you to wonder whether that condition will continue, and when it does you must remember that this period is after this Company has been organized and operating as a unit twenty years or more and the record is for nine years. You have got an example of it right down here at Hanover Street. There will be a whole lot of track will pass out through obsolescence when the Hanover Street Viaduct is built. There was track on the Mt. Washington Bridge passed out the same way. It's not in here because this is only up to 1926 inclusive. That is 2¼ miles a year on 405 miles of track.

Q. And does that include track replaced, track taken up because it's worn and replaced? A. No, sir, that is track that's abandoned. It's gone.

Q. That's a separate item then? A. That's another item. In this case it is possible to separate straight obsolesence from the termination of track where it is reconstructed. In this case it's possible to do it. In that case of course it's all obsolescence.

Now that takes out all of the track except the car house, storage yard and loop, track which is quite expensive track, because if you will think of it a minute, you will realize there is an enormous amount of special

work in these car houses. That goes out with the car house, that track, it does not go out thru the ordinary abandonment or rerouting and it will carry a heavier rate, probably will carry a rate of 2½%. If you weigh those two, the two and a quarter miles on the four hundred and five miles and the two and a half per cent on the 29 miles, you get a weighted average rate of retirement thru obsolescence, over the last nine years of seven tenths of one per cent. and if you apply that to the value of $20,025,900——

Q. The value of track that is? A. The value of track valuation. You have an item of $140,200.00 a year. Now that is obsolescence.

In the last eight years there were rebuilt an annual average of 12.47 miles of paved track and 4.01 miles of open tee rail as shown in the chart which follows page 5.

Q. Now you are coming to the other feature, the feature of reconstruction? A. Termination because of reconstruction. That track as it was weighted in the valuation was worth about two to one, that is the paved city track was worth about twice the open tee rail in the houses. We used that to get a weighted retirement in that ratio, without in this case county grading which we do not consider here to depreciate altho there is a small depreciation generally given to it.

Now on page 7, you will find a credit there of 66 2-3% which is not renewed. That's rather a generous credit because we don't generally find that much ballast that we can keep, but we put it in two thirds of the ballast, and we figure that 60% of the grading must be done over again. That is you don't have to dig the space that the ballast occupies and the dirt is carted away to a dump. You do have to break up an increasing amount of concrete base, of paving which grows more expensive as the dirt goes out. There is also a credit of somewhat less than 50c altho we use 50c for rails. The rail itself is not worth taking out for salvage, but if you have got to open track up and take it up, you have got it and you can get somewhere between 30 and 50c use out of it. Sometimes on open track it may be more, but it's generally less.

Now from that you get a value based on the valuation figure of $47,800 a mile for the city track; $20,900 per mile for the open tee rail. That's an average over a period, includes the paving which in some places will amount to as much as seven or eight dollars a foot alone and includes all special work. Just simply multiplying those miles by those figures you have a retirement charge a year of $679,600.

The engineering department has its own estimate of what their depreciation expenditures are. That's also given on that page. It's just about 13% higher. There is a reason for that, that the class of track that comes out, this is an estimate for next year, which will be five years after the valuation, and the amount of light track taken out grows constantly less as it naturally would. Nevertheless they have a check within 13%

Now account No. 512, roadway machiney and tools.

Q. Are you passing from track now? A. I am passing from track.

Q. What was the figure you got for the passing out of track due to both causes? A. $619,800.

Q. And if I understand you that is your estimate of the average actual retirements of track each year over a period of years in the future? A. It is.

Q. And has nothing to do with any depreciated condition of the track that isn't actually retired? A. Those tracks are actually gone. They are not there and we have taken them out of the valuation.

Q. So a provision of that amount that you have just mentioned, would in your opinion only meet without creating any permanent reserve, would only meet the actual average retirements of that which are to be expected? A. They would. Account No. 512, roadway machinery and tools, is generally given a rate of depreciation for retirement of about 10%, sometimes as high as 15. We have not claimed any allowance for it here because our general practice has been to maintain most of it out of maintenance. That's kept up from time to time and we don't want it here.

Q. So you haven't included it? A. We haven't included it. Now when you come to bridges, tressels and culverts, in the last nine calendar years, there has only been retired one bridge thru obsolescence. That's Bel Air Road. The value in the valuation of that was $12,179, but already in this year we have had Mt. Washington go out at a value of $83,711 and the Mt. Holly at a value of $19,066, making with Bel Air a total of $114,951.00 thru obsolescence alone, with not a question in it of depreciation or wear or anything else.

Q. As a matter of fact was the Mt. Washington viaduct found to be in any present condition in the valuation case? A. The Mt. Washington viaduct was found to be in very good condition. It went out the minute that the Management decided that public policy required that they use the bridge the City built alongside of the one we already had.

Q. Any salvage in the Mt. Washington bridge, that can be used for anything else? A. There may be some salvage in it.

Q. By taking it down? A. But there won't be anything to affect you. If you consider your wear and tear on your bridges, which must take place, you have got nothing there to credit the salvage.

For that reason we believe that, for this very certain reason, uncertain as to amount and time, but perfectly certain it's going to happen and occur, we have placed an allowance of 3% or $38,400.

Crossings, fences, and signs account No. 516 is also considered to be maintained thru maintenance.

Q. In following these accounts, you are following the classification of the depreciable property that was adopted in the valuation? A. Using the classifications and the amounts set up in the valuation.

(Commissioner Harper) In bridges, you covered a period of nine years?

(The Witness) That was just the history. Now in Cars we had more, Senator, but the trouble was when you got back of nine years of track, the track was of such

different construction, and the operation was so different, that the figures, and also the war came in that they figures in that particular thing. We didn't have the records back of that to use and we used nine years as a typical stretch of time.

(Commissioner Harper) Do you mean that the realized obsolescence during this nine year was 9% of the value of the tressels and bridges?

(The Witness) This is obsolescence alone now, there is nothing else in that, and you must put something else in it of course. Yes, it was 9% realized in two years as far as that goes.

(Commissioner Harper) But in the whole period of nine years this was the total obsolescence?

(The Witness) Senator, I believe if I had the records, which I haven't and I can't get, you will very likely find other bridges and structures, that came after them, so ten years or twelve years before wouldn't affect that.

(Commissioner Harper) The only purpose of my question was to ask you how you reached the estimate of 3% as a material allowance.

(The Witness) Because we considered in the valuation, the testimony was about 2% as a depreciation charge, and you remember the afternoon Mr. Pagan was here, and talked on that subject, and this is only adding something to it to try to cover the obsolescence which on track alone is about 7-10ths of one per cent. and a bridge would go out very much the same way.

(Mr. Clark) May I ask a few questions here for information, Mr. Hill?

(The Witness) Yes, sir.

(Mr. Clark) That this Mt. Washington Bridge. I understand that went out and was retired. What took its place.

(The Witness) The City viaduct built right alongside of it?

(Mr. Clark) Who built that?

(The Witness) The city.

(Mr. Clark) You have nothing to do with it?

(The Witness) No.

(Mr. Clark) Now when you speak of obsolescence in the sense in which you are using it here, that is where a piece of property has gone out and you have to replace that with another piece?

(The Witness) No, it's gone out. You have got to have something to balance your capital structure.

(Mr. Clark) That's just a book balance, no hardship on the Company.

(The Witness) What, not to lose its property, that it gets its return on?

(Mr. Clark) If it's given a new piece of property——

(Mr. Markell) We didn't suppose we would be allowed to value that city property as a part of our property.

(Mr. Clark) You mean when you speak of obsolescence, you speak of a piece of property going out that's obsolete and replaced by another piece. Now is that so with respect to Mt. Holly too and Bel Air Road too?

(The Witness) Yes, sir. All our bridges go out that way.

(The Chairman) In other words, you take the bridges, Mt. Washington Bridge, Mt. Holly Bridge and so on, and that becomes obsolete because something better is built right alongside of it which you have the right to use?

(The Witness) We almost have to use it because of public sentiment.

(The Chairman) Well it's to your advantage to use it. While you perhaps have to lay tracks on that bridge and maintain those tracks you avoid the maintenance of the whole structure?

(The Witness) Yes.

(The Chairman) Therefore you are to that extent better off? Now you think that the public ought to pay for

that structure which has become obsolete and withdrawn for service, while at the same time the public is footing the bill for the new structure, which you use?

(The Witness) It's gone out of any rate base. The Company had to put up the money for it. Now you take a car. A car goes out because of public convenience. The cheapest thing in the world to run was the old open car, and whenever a thunder storm came up——

(The Chairman) But you have had to provide something for that in that case. In this case the public provides the structure and allows you to use it.

(Mr. Markell) But if we had to provide something we would get a return on it. It's lost to us and we get no return on this.

(The Chairman) But you are no worse off?

(Mr. Markell) Yes, we lose the return on it.

(Commissioner Harper) You lose that much in the rate base but you probably save something in maintenance?

(Mr. Clark) The rate base is another way of expressing property on which you earn?

(The Witness) That's true.

(Mr. Clark) Now then you have another bridge there that you pay nothing for, and yet get your earnings so far as you get them from the operation of that bridge, just the same as you did the other bridge?

(The Witness) How can we when we haven't got the bridge?

(Mr. Clark) Did you actually charge that $83,711 to depreciation?

(The Witness) We will have to this year.

(Mr. Clark) You have done that, haven't you?

(The Witness) We have got to this year. It's gone.

(Mr. Clark) Do you recommend that?

(The Witness) How can we help it? That element of value is gone from the rate base.

(Mr. Clark) You can't help it, but you shouldn't do it.

(The Witness) Now in account 517, signals and interlocking apparatus, there is an analysis there showing how the signals have gone out. Some of them have gone out, a whole signal system in at least two years. A signal system that was put in on the best advice and the best engineering we could get and became obsolete in two years time, and for that grade of property that was going out at this rate, we have set up a rate of 5% or $7,300.00.

Poles and fixtures, account No. 519, we have three classes of poles. We have the iron poles, wooden poles and the concrete poles. The iron poles have considerably more life in them. They are in first class shape and for them we ask 3% to cover the action of public authorities where we are required to remove poles for curb lines, to cover any catastrophe such as major sleet storms and to cover the ordinary item of retirement.

The wood pole, altho it has a rate of retirement of about eight years, we maintain mostly thru maintenance, the so we only ask for 2% to take care of the ordinary obsolescence where it occurs over a long time and the question of storms and acts of public authorities, which gives a weighted average on poles of 2.8% or $32,900.

In underground conduit lines, there is very little experience of anybody so far. They have not been in use long enough to have any history except the fact that obsolescence because of the change in lead centers, change from steam generation to purchased power, and the orginary wear which must occur in everything we have set up 2% or $4,000.00.

Q. Aren't they burnt out sometimes? A. They are also burnt out.

Q. I have seen it happen? A. Yes. In the distribution system, I won't go into this unless you want, we have a careful analysis of this, which is available and

I shall be glad to go over the amount of retirements that have existed since we have had this sort of property and I have gone into it at some length on pages 13, 14, 15, 16, 17, 18 and 19. There is a summary of it on page 20 in which these rates as found from our experience are applied to the amount of the Commission's net value, less the salvage, which in this case, and it's the only case we have practically there salvage is quite an item, and a salvage of $731,000 estimated in three million and a half, it gives an over-all weighted average of retirement of 7.12% or $252,900 a year.

Q. Now as I understand that like the rest, is based on actual experience? A. That is based on the experience of the Company and the experience of it's Power Department.

Q. And was dug out of the records by you? A. By the officers of the Company for me in this case.

In shops and car houses, we have not had retirements in this class of property from which we can get a rate except to go back to the rate of our general buildings, when there came a change from the horse car to the cable and from the cable to the electric, which in that case ran anywhere from 5 to 14%, and we have asked for an allowance here of 2½% per year to cover that item of $108,700.

The same statement applies to a greater extent in account No. 524, stations, miscellaneous buildings and structures, where there has not been sufficient history in the Company to get an actual retirement rate from our own experience, and we have to use what we consider a conservative reasonable rate of 4%, or $13,400.00.

Q. What does that mean? Mainly buildings or what? A. These stations are waiting stations and things of that kind and are subject to very hard wear and also to being moved due to changes in traffic conditions.

Park and resort property changes quite rapidly. Take for instance the old Lakeside property is gone entirely. There are changes taking place all the time in it, in what you might call the amusement park, it's subject to a very rapid rate of obsolescence, and determination because of

wear and we consider 5% would be a very conservative allowance to take care of that item of $25,500.00.

The other expenditures, way and structures, consist mostly in the trackless trolley. We have put in there that that has already been written off and no allowance was claimed for that.

Q. In other words the trackless trolley didn't work, did it? A. Yes, it worked and I think really technically we are entitled to it, because I remember now it was in the valuation and as it goes out our valuation shrinks. It was probably a mistake that we didn't put it in. But it happened to be off the books and they agreed to pay for it; as I remember, we set up a rate of depreciation on it, because it was so doubtful as to how popular it would be, that it happens to be written off the books.

Q. Now your next item is a very big one? A. The next item is passenger and combination cars and freight and passenger cars and the equipment of them.

Q. What's the total of that in the valuation? A. The total of that item is $18,111,897.00.

Q. So with the exception of track that's very much bigger than any of the items? A. That will take up another 35% of the items and those two give you the 75% which I mention in here on which we are able to reconstruct the history from our own records.

Now if you will turn to page 23 you will find a statement there of the life of our cars, as close as we may come to it from the records.

Q. That's allowing for mortality from all causes whether from wearing out or become obsolete. A. That is principally obsolescence. If they were worn out they were probably maintained thru maintenance, but that's mostly obsolescence.

Q. It's all from their source tho? A. It's the whole story of the car. You have a weighted average life in one thousand and 22 cars of 15.8 years. When we considered that, together for the care that we have now, we felt that a 4% allowance on that would certainly not more than protect that property, if it did that.

Q. Is 4% better or not as good as your experience here? A. The experience here amounts to about 7%. As you will notice there we have retired cars as low as six years. There has been a rate of retirement prior to 1923 of about 56 cars a year. It is very uncertain in its application. If you will notice there there have been periods as high as six years where no cars were retired, there has been a period of four years when no cars were retired, and another period of three, but at the end of those years you see a very heavy retirement. The amount of those cars will be $725,000.

Q. That's 4% on what would be an average 25-year life, while your experience is only 15 and a fraction year life? A. That's right. There may have been in that experience here some cars we still have and therefore we have raised it by about 67%.

Shop equipment is maintained by this Company practically thru maintenance.

Furniture is maintained thru maintenance, and we consider miscellaneous equipment to be maintained thru maintenance. On those accounts it is probably a good practice apparently of other companies to get a rate of anywhere from 5 to 10%.

Q. For depreciation? A. For depreciation and retirement. We have power plant buildings, only power plant now. We have used 2½%, or a forty-year life on it, and there is only $45,500 in that amount. There is a money allowance of $1,100.

Substation buildings falls into the same class as the car houses except that the equipment that it is built to house is commonly superseded more frequently, and we have allowed 3% on the item, or $14,200.00.

Power Plant equipment is the same rate. It's only a small item anyway, $169,000, as the substation buildings and we have allowed 3%, or $5,100.

Q. That power plant is the same plant that account No. 539, power plant buildings, refers to the buildings and houses? A. That's right. Substation equipment in the valuation of 1924, there were 8 manually operated synchronous converted substations. Since that time four more

have been added of the automatic type. Those are the four which I said cost $600,000, and altho the oldest ones have been in service 24 years, we are not able to determine actual rate of retirement, but they will be greatly affected by the changes that affect traffic, because as the necessity for the load distribution centers changes the necessity for this equipment in the place it's in must change too, and on this type of equipment the obsolescence, because of improvements is very heavy. For that reason we have asked for 4%, or $73,500.

Now we have account No. 544. I won't read it to you, but I want to go over some few of the main points. An analysis of our underground cables, since the time they were first put in, about 25 years ago, and the actual retirements in them, I worked that out, gave an annual retirement rate of about 4 and a third %, except for the Bay Shore Line, which is a wooden pole line, where a 7% rate is considered necessary. We apply those rates and we get an annual charge of $27,000, a weighted average rate of 3¾%. We have there on that basis a total of $2,000,000.

Q. Now you adding up? A. We are taking up as a whole all the items we had. We have on that basis, $2,-149,000, which is about 4%, or a trifle more of that depreciable property of the Company.

Now those are the first two methods of arriving at an absolescence charge.

We have also taken the rates as given to us, where we could find them, get them of some other companies, Washington, the International Railways of Buffalo, Boston and a Company who has asked that their rates be kept confidential, but I am perfectly willing to give the engineers of the Commission the name of that Company and show them the rates. We have applied the individual rate of those four companies to the amounts of money allowed by the Commission in each case to us and we have gotten the following overall percentages of depreciable property our depreciable property. Washington 3.9%, International Railways Company of Buffalo 4% on their valuation based that 4% is.

Q. That's not on cost? A. That is on their valuation.

(The Chairman) How was that established?

(The Witness) By the Public Service Commission of New York, sir. I will read you their letter, if you would like to have it, Mr. Commissioner.

(The Chairman) No.

(The Witness) They simply said that that is what it is on. Boston 4.3%, and this other Company 4 and a half percent.

(The Chairman) All on valuation?

(The Witness) The Boston Company, I don't think, has got any valuation. I think they set that up for what they think they have to get to reproduce, that is so much rate on that.

(Commissioner Harper) Is it the result of rate proceedings?

(The Witness) Boston didn't have any rate proceedings to that extent, as I understand it. They were guaranteed.

(Mr. Tingley) The Public Trustees can fix the fare?

(The Witness) Yes, and this is what they set up to keep them whole.

(The Chairman) When you say four and a half per cent, that's of what?

(The Witness) The basis is this, we take their rate which they give us, they give us 4% on track, for instance. We apply that to our track. We apply their rates all the way thru, instead of the ways that I have figured from the history and they are very close. I figured my own first and got these others of confirmation afterwards. They are rather hard to get because they do is different ways. Most of them just put the maintenance with it, and of course the minute you do that any base disappears, and we have applied that to our base which the Commission gave us. Then we have added up the items in that base, because in some places, for instance, Boston has no park and resort property, neither has Washington in their valuation. We have added those up and we found the

amount of money that those rates give us and we divided one into the other and get an overall rate.

In other words, there is $47,979,675.00 that we have that can be applied to the same things that Boston has, and the money that Boston has on that is $2,056,000, and divide that in and you get your 4.3%.

Then one further thing must be remembered, that of course there has since that have been added, the date that these values were put up, at least a million dollars of bare bones addition of capital to the valuation, thru cash expenditures, which also must be taken into consideration.

Q. That's what exhibit No. 23, that you first testified about shows? A. Yes, and that is why I added that $40,000 which the 4% on that would give to the $2,149,000, and it gives me my approximate $2,200,000, or a little better than 4% on the depreciable value.

Q. So the net result of all of your investigation and of your testimony is to indicate that about $2,200,000 will be required on the average each year to take care of necessary replacements of the property that is included in this valuation and of the Commission and which has been added to it since, is that right? A. Yes.

Q. Or expressed as a percentage on the valuation you say about 4%? A. About 4%.

Q. That's all I have to ask you, Mr. Hill, unless there is something you desire to say yourself. A. I might say that as far as the valuation is concerned, I have put into the hands of your engineers all the data we had and it is probably easier to show where it comes from in this little book that I have here (indicating) and any time they desire I will be glad to go back and make any corrections.

NINTH DAY.

Thereupon—

BANCROFT HILL,

a witness of lawful age produced on behalf of the Applicant, having heretofore been duly sworn according to law, whose examination was suspended for the purpose of adjournment, resumed the stand, was examined and testified as follows:

CROSS-EXAMINATION

By Mr. Tingley:

Q. Mr. Hill, taking Exhibit No. 23, which was filed by Mr. Emmons? A. Yes, sir.

Q. In that exhibit easements are valued at seven million dollars, are they not? A. Yes, sir.

Q. The question of easements value is still pending before the Commission, isn't it? A. It is.

Q. Does this estimate indicate that seven million dollars is the maximum expectation as to easement value? A. No, it indicates that at that time that was all the indication of the value we had.

Q. That was the only indication of value that had been given? A. Only official one.

Q. How many miles of track are not longer being operated as a result of the rerouting program? A. There have gone out 18,107 feet, which would be about three and a half miles.

Q. Is that mileage or any of it included in your track abandoned or removed? A. No, but there has not been figured anything for the track put in. We have put in track.

Q. How much? A. I don't know. It's in the total amount of cash put in without the overhead.

Q. What is the total amount of track abandoned and removed and the total amount of track not operated because of rerouting program?

(Mr. Howard) During what period?

(Mr. Tingley) Since the rerouting.

(The Witness) You mean since the valuation, Mr. Tingley?

Q. Yes, since the valuation? A. This figure of 18,107 feet is what I understand that track to be.

Q. That's the total of both track abandoned because of rerouting and all track abandoned and removed? A. It is the total of all track abandoned and removed from any cause.

Q. Now how about track that has been abandoned because of rerouting but not removed? A. That track, to what extent it exists, I don't think there is very much of it, but to whatever extent it exists is still in good operating conditon and it may be used again.

Q. Now in a good many cases, the joints connecting it to other tracks have been disconnected and have been taken out? A. In some cases. I doubt if it's a good many cases.

Q. So that track wouldn't be in operating condition, would it? A. Yes, the track would be if you connected it up again. They are not using it today.

Q. It isn't used or useful then at the present time? A. Well, it's useful if you want to connect it up, yes.

Q. It isn't used and useful at the present time? A. It is not used, no.

Q. Has any deduction been made from estimate of easement value on account of these track retirements? A. No.

Q. To bring the valuation to date wouldn't such a deduction have to be made? A. Yes, I believe such deduction would be made.

Q. If that deduction were made for track abandoned, and an allowance made for new track installed, what would be the effect on the claim made for easement value? A. The difference between them, whatever it is. I can find that for you.

Q. Have you made any allowance for depreciation to

December 31st, 1923? A. Only to the extent of retirements. We have figured the retirements.

Q. But only to the extent of retirements? A. Only to the extent of retirements.

Q. Has any depreciation been incurred aside from retirements since December 31st, 1923? A. I believe in my own opinion, whatever its worth, that the company is in good operating condition from observed depreciation, as it was at that time. We put in more new money than the amount of present-day value of old property removed, and I believe we are in as good present operating condition as it was.

Q. The property has been kept up through maintenance and depreciation reserve, hasn't it? A. The property has not been kept up through depreciation reserve, because I don't think we have accumulated either or set aside enough for replacements leaving aside the question of reserve. Its been kept up through capital as I think is evident from these exhibits here. If you take the present method of setting up capital, it is much more than we get when we retire it as I have endeavored to do here at present day value. We haven't got as much capital, that is, we haven't got as much assets.

Q. By saying its been kept up through capital, you mean the difference between retirement and replacement cost is made up of new capital? A. Yes, sir.

Q. Don't your figures for additions include the cost of retiring the property replaced? A. No, I think not. The auditor was asked to get me only the cost of construction out of our depreciation fund or out of new capital.

Q. So while Mr. Markell referred in his opening statement to a subtle process of confiscation that had been going on in this company's affairs over a period of years, which consisted in the company's not being allowed to earn enough to provide for retirements as they accrued, this subtle confiscation, if I understand you, consists in fact that the company is only allowed to build up a depreciation reserve to provide for the retirement of original cost and not of replacement, is that correct? A. I

don't believe Mr. Tingley that they have been allowed to do that. If you will examine the cars and those items, I don't think they have been allowed to do that. I think in one of the opinions in one of the fare cases, it was stated that this did not take care of the retirement of but forty cars a year.

Q. Is the balance in the depreciation reserve at the present time sufficient to take care of all accrued depreciation at original cost figures? A. I don't know. I think that would require an examination of what that account consists of which I have never made.

Q. Was the discovery of this subtle confiscation yours or that of counsel? A. Why I think it came simply from an examination of the figures of what we were doing. When we set up here the valuation additions and when we set up the book additions, it was perfectly apparent to us that something was happening to us; that we were building up capital and we were not building up plant. I don't claim the glory of this thing myself.

(Mr. Markell) Don't be too modest to answer.

Q. You know the present method employed by the company is required by the Accounting Rules of the Public Service Commission, don't you? A. I don't know, but I wouldn't be at all surprised.

Q. Do you know that those rules are based on the Inter-State Commerce Commission rules of accounting? A. I wouldn't be surprised at that either.

Q. Are they enforced elsewhere? A. I don't know. That would be an accounting question, Mr. Tingley. I have only tried to find what we would have to put up to keep us where we are now.

Q. Did you start out with a total figure and try to justify it by showing the rate of depreciation to be anticipated for the various types of property or did you start with the retirement needs and bring up to that figure? A. No, I started with a study of what was happening to us and how fast our property was going out. In some places we have had to estimate that and in that case I have indicated that it was only an estimate, but

an estimate that I think was in line, when you find the weighted average rate of other companies and you consider the whole history of this thing, is apparently reasonable.

Q. The first factor you considered in arriving at your depreciation allowance was obsolescence of the entire character of service, such as the replacement of horse cars by cable cars and cable cars by trolleys, wasn't it? A. Yes, sir.

(Mr. Howard) You mean that was the first method?

(Mr. Tingley) That was the first method, yes.

Q. (By Mr. Tingley) Do you think that a capital loss that the company experiences when its service is superseded by another character of service, should be borne by the stockholders, or that the public should insure against the changes in the art? A. If those that are to put out the capital for any public enterprise are not going to have a reasonable opportunity to keep that capital intact, I personally, and it's only my personal feeling about it, don't see how we can have a public utility.

Q. That's your personal feeling? A. That's all. It isn't worth any more than just that.

Q. Do you know any companies that have been allowed to set up a reserve against possible changes in the art? A. I would say that the International Railways of Buffalo, for instance, set up 4% on their valuation figure, which they inform us that they do, which comes so close to what is indicated is the general change of 4½ to 5%. I believe they do do that.

Q. And that's true in spite of the fact that tomorrow the entire industry might be superceded by buses? A. As I say about the cable roads, the mere fact that such a necessity was not seen, it doesn't mean that it isn't there.

Q. What private industries do you know of? Or what private companies that set up a reserve against supercession of the industry? A. Why, I have never had a

chance to find that out Mr. Tingley. No companies make those things public.

Q. Isn't there a period of relative stability attained by all industries after the first developmental period has been survived? A. It hasn't in this. You take the condition when the cable roads came here. They were supposed to be the last word in rapid transit. They were as far as that went, as I said yesterday. Mr. Hambleton, who was the president of the company, and Mr. House were hailed as being great benefactors of the city.

Q. How long did the cable cars come after the horse car? A. About thirty years.

Q. How long did it last? A. I think about seven years, before it was practically obsolete.

Q. How long has the present form of operation been in use? A. I think the present form of operation has probably been in use for ten or fifteen years. There is to me a very distinct form of transportation——

Q. Pardon me, just a minute. Are you talking about the general method of trolley operation or the character of track? A. It's the character of the track, it's the cars and it's the power. There isn't much more to it except the easements and things of that kind, they didn't change, but when I asked for 5%, I only asked it on the depreciable property.

Q. Getting back to something that we have all seen very recently, you saw the Pageant of the Fair of the Iron Horse, didn't you? A. Yes.

Q. And in the early states of the development of the steam railroad industries the changes were very rapid and very fundamental in character, weren't they? A. I don't know how rapid they were. I doubt if they were any more rapid than they are now.

Q. Every year or two didn't they? Not fundamental now are they? A. Yes, fundamental changes now. That King George engine was a four cylinder engine, absolutely radical. The booster has come in. The booster is a locked gear engine that works on that small wheel

under the cab. There has an auxiliary engine come in under the tender and the automatic train control has come to our engines.

Q. Aren't those changes in method rather than fundamental changes? A. No, we have three cylinder engines in this country and we have four cylinders abroad. I would think they were very fundamental differences, but I am not expert on steam railroads.

Q. What industry do you think is likely to supercede the street railway industry? A. That I can't say and I don't think anybody else can say. But also they would have told you the same thing with the cable cars.

Q. Do you think the street car is in danger of being superceded by the buses? A. No, I don't think so. I don't think they haul enough people, but once more I am only giving you my personal opinion.

Q. If there is any danger of supercession, it would appear to be from that quarter, wouldn't it? A. No, I think not. There are changes in the art. For instance, in some cities we have the one man and two men cars.

Q. Is that a change backward or forward? A. I say it was a change forward, and it was becoming more economical, and they have been in cities where even the newspapers have talked for the one-man car, and——

Q. That's wasn't true of Halethorpe, was it? A. I doubt it very much. I understand it wasn't.

Q. If there is any possibility of supercession of the street railways industry by the motor buses would that tendency be furthered by an increase of fare that would make the fare equal to that charged for motor bus operation? A. I don't believe so.

Q. You don't think that would have a thing to do with it? A. No. I can't imagine that anybody is going to do any great amount of walking for two or three cents.

Q. I don't think you understood the question.

NOTE: Question here re-read by court reporter.

A. No, I don't think so. If it is any interest to you,

Mr. Tingley, I think motor bus fares have to go up in places where they use them pretty soon, when they come to the point where the buses wear out and come up to this question of depreciation like we are.

Q. Are motor buses losing or making money? A. Our buses, I think one line is making money.

Q. How about the revenue passengers on the bus lines, are they increasing or decreasing? A. I think they are increasing.

Q. Mr. Hill, the whole theory of your study is to establish a retirement reserve rather than a depreciation reserve, isn't it? A. The whole theory of my study is to try to meet the rate of our retirements. I don't believe we are going to establish any reserve except one year we may have a little more and some year we may have a little less. I think after a company has been in business as long as we have, and have history that we have, to go back on they ought to be able to tell for a reasonable period of years what their probable retirements will be.

Q. Does that contemplate a complete change of policy for both the company and the Commission? A. I wouldn't be surprised.

Q. Which of the four cities you named, Washington, Buffalo, Boston and the mystery city, are allowed a depreciation rate based on valuation? A. The International Railways of Buffalo I think.

Q. Is that the only one? A. They are the only ones that say. I don't know what Boston bases theirs on Mr. Tingley.

Q. The Buffalo Road is an interurban road, isn't it? A. I think it runs out to Niagara Falls.

Q. It does. Don't you think the company's experience of retirements is a better guide in estimating depreciation requirements than life tables? A. I don't think life tables, as you call them, would be anything but experience. That's all we have got.

Q. I mean general life tables rather than the experi-

ence of the company? A. Except for a few things, such as buildings and things of that kind, which we haven't had experience enough, we have had some terrible mortality in buildings, but they have been in the cable and the steam plant and that sort of thing, but except for that I have tried to give you the history of the experience of our retirements and based it on that.

Q. Haven't the company's annual retirements since beginning to set up its reserve been less than the total amount set aside? A. Why no, I don't believe so.

Q. If they haven't then the company wouldn't have been able to accumulate a reserve, would it? A. The company's cost of replacements, which is a different thing from the company's retirements, the company's cost of annual requirements has certainly been a lot more than was set up.

Q. Why was the particular method of 5% of gross income for depreciation adopted by the company in the first instance? A. Well, I have heard that discussed in every case we ever had, and it seemed to me, for whatever it may be worth, that about that much was considered at that time to be available for depreciation and was used for that, but once more Mr. Tingley I am only giving you my personal advice, I haven't gone into that.

Q. Isn't it true that the company's failure to set up a depreciation reserve prior to 1912 is largely the cause for its wanting to increase its allowance now? A. No, we are not asking for anything back. We can't, I am sorry to say.

Q. That isn't the reason for it? It isn't deferred maintenance? A. No, indeed. We are only asking you now to not let us get any worse.

Q. You are just anticipating that the future is going to be different from the past? A. No, I am anticipating the future is going to be just like the past.

Q. Now in estimating the probable life of property by considering past retirements on similar property isn't it important to consider a long enough period of

time to allow for the operation of the law of averages? A. We used I think 18 or 19 years on cars, which was about 35% of this thing.

Q. You used eight years on track? A. And used eight or nine years on track, because there has been a very radical change in track in this city, if you remember——

Q. Yes, I do. A. Back of that period. About fifteen years ago I guess it was, there was a straight or practically a revision in track. We had the dirt ballasted tram girder rail cobble stone track, and its been replaced with a very much heavier and a very much different type of track, and the rail on it is different.

Q. Mr. Hill, turning to page four of your study, "Tracks."

(Mr. Howard) You are on the other exhibit now.

(Mr. Tingley) Yes, on the other exhibit. That's Exhibit No. 25.

(The Witness) Yes, sir.

Q. What salvage value did you allow for steel rails retired? A. The cost, I am informed by our engineering department, of removing that stuff is so close to any salvage that you may get out of it that there is practically no salvage in it. When you take out track, to replace it you have got to do your excavating anyway, so you have got to remove the track, and the track so to speak there is a by-product.

(Mr. Howard) You mean there is salvage in that?

(The Witness) There is, and we allow salvage of 50c a foot.

Q. Isn't some of that steel rail taken up and relaid and used for maintenance purposes? A. I don't think to any appreciable extent.

Q. Don't you know whether it is or not? A. Yes. I asked that no maintenance be included in any of these figures that were given. Now I will go back if you want in that and make sure that there is no maintenance in that.

Q. If some of the rail is being used in that way, it's worth more than scrap value? A. Yes, if there is any percentage of it.

Q. And if the proper allowance were made of that item and it is being used, the life of the expectancy would be increased and the depreciation allowance decreased? A. Yes. The company's life expectancy would be increased.

Q. Your allowance on trackage was based on your average experience for the last eight years, wasn't it? A. That's right.

Q. And you reached a figure of $679,600.00? A. Yes, sir.

Q. Do you know what the average charges to depreciation reserve for track renewals for the last eight years have been? A. No, I do not.

Q. Would it surprise you to learn it had been less than $400,000.00 a year? A. That's a very good check. It's about half. It wouldn't surprise me. It would make me feel——

Q. That you were as close as could be expected? A. Yes, sir.

Q. That's the highest was $453,000.00 in 1919? A. I don't know anything about the year, but I wouldn't be at all surprised. This track will run just about double owing to the normal labor increase in it.

Q. Why should the Commission allow the company more for its future requirements than past experience would seem to warrant? A. Well, that's to say that you can never correct a mistake when you believe you have made one.

Q. What's the evidence of a mistake in the experience of other companies? A. Why the experience of other companies is that we do find companies that are putting up about the same rate on the value, and some of them are putting it up on the reproduction new cost.

Q. How many of those companies did you find? A. I was only able to get hold of four companies, the rates

of which were distinct enough to apply in the manner we have applied them here.

Q. Now out of those four how many were basing their method on the valuation? A. One was certainly doing it, and I don't know about the others, but Mr. Tingley it wouldn't make any difference to me whether I found they were making a mistake or not, I wouldn't consider that any reason why we should make a mistake.

Q. I am just trying to find the basis for this subtle confiscation? A. The basis is that our debt is being increased without a corresponding increase in our rate base as figured on the rules that have been laid down, and I think it makes no difference what other companies do. If they don't know that I will be very glad to go and tell them about it after I get through here.

Q. I am sure of that. Turning to Account No. 515, Bridges, Trestles and Culverts? A. Yes, sir.

Q. Hasn't the Mt. Washington viaduct already been retired? A. No, sir. Wait a minute. I beg your pardon, I don't think it has. As a matter of fact it only took place this year.

Q. Provision will be made for it this year, won't it? A. If we have money enough. I hope it will.

Q. Will the company have to replace any other bridge in place of it? A. No, but the value of the bridge has been used up in public service, and we certainly are not supposed to lose that money.

Q. The same thing is true of other bridges? A. All three of them, yes.

Q. They will have to be replaced by the company? A. No, but the capital is still on the books for those bridges.

Q. If nine years prior to 1927 had been taken for the purpose of your study, wouldn't it have resulted in an allowance for depreciation of one-tenth of 1%? A. Why no, Mr. Tingley.

Q. Let's see. The Belair Road bridge was retired in 1925, wasn't it? A. Just a minute. There was $1,281,000.00 and if you take this nine year period——

Q. Prior to 1927. Not including 1927? A. Oh that happens, yes. I have places where there were six years, where there were no cars retired, and in that case we needn't have set up anything, of course, and the next year we were faced with three or four hundred.

Q. It makes no difference what period you take? A. I have tried to take a reasonable period, a calendar period. Where a thing was patently before you I think we have a right to take cognizance of this.

Q. For instance, in this nine year period, prior to 1927, not including 1927, the Belair Road bridge was the only one retired? A. That's right.

Q. That cost $12,179.00? A. No, it didn't cost that. That's its present day value.

Q. That's the only figure that you have against it, isn't it? A. That's all.

Q. And that divided by nine years would give you $1,350.00 a year? A. I wouldn't be surprised.

Q. And that divided by your $1,281,000.00 would give you one-tenth of 1%? A. That's right. A thousand years for the life of your bridges.

Q. Has the company retired any bridges besides the Belair Road bridge in fifteen years prior to 1927? A. I think so.

Q. Which one? A. They had an interest in the Light Street bridge that went out right before this.

Q. Is that shown on the books of the company? A. The interest in the Light Street bridge?

Q. No, the retirement? A. I doubt it.

Q. Do you know of any other bridge that's been retired in the last fifteen years prior to 1927? A. No.

Q. If only $114,951.00 of bridges were retired in fifteen years wouldn't the percentage be reduced accordingly? A. I am asking now for the deterioration of a million dollars worth of bridges or a million and a quarter and also for obsolescence.

Q. But you based it on retirements, didn't you? A. No, this is one of the cases where we gave what retirements needed and had to be satisfied. It's a very small item in the whole thing. It's not the 75% I say we had history on.

Q. But doesn't your result depend on what period of the history that you take? A. Oh, yes. Just as I say you can take a period of cars and show nothing at all.

Q. And by taking different periods, by your method, you could arrive at any desired result? A. No, the results were very undesirable.

(Commissioner Harper) In the vaulation case, what was the life of the bridges placed at?

(The Witness) We were advised there by the only one I think that testified on it, and certainly competent to Mr. Pagan, as I remember, 2% he would advise any client to put up no matter what the history of the bridge or how old it was.

(Commissioner Harper) Fifty years life.

(The Witness) Yes, it made no difference.

Q. And he estimated depreciation at 2%? A. And he was not take obsolescence in any sense.

Q. How do you know he wasn't? A. Because we asked him as I remember the thing.

Q. In the last ten years, according to your testimony, $114,951.00 has been retired for bridges, hasn't it? A. No, sir It has accumulated for bridges. It has not been retired.

Q. It has been accumulated for bridges, and that's at the rate of $11,495.00 a year? A. That's right. About 1%.

Q. And now you anticipate $38,400.00 a year for the future? A. That's my 1% plus Pagan's 2%, gives me 3%. That's how I got it.

(Commissioner Harper) 2% then is depreciation and 1% is obsolescence?

(The Witness) That was where I got my 3%, Senator.

Q. Taking your accounts Nos. 530 to 533, cars? A. Yes.

Q. In the table on page 23 did you use all the cars shown to get your weighted average life of 15.8 years? A. You mean all the cars in that table?

Q. Yes? A. Yes, I think we did. That was my instructions that they should do so.

Q. Now out of 1,022 cars shown, aren't 719 single truck cars? A. I wouldn't be surprised.

Q. Does the company have many single truck cars now? A. I think, I don't remember the proportion of the units, about 85% of our mileage is made with double truck cars.

Q. Didn't the single truck cars shown in the table show generally the shortest life? A. Yes, well, I don't know whether they do or not. I never looked at them that way.

(Mr. Howard) The table shows which are single and which are double, don't they?

(The Witness) It does. Yes, the three sets of double trucks there have had longer than average life.

Q. Wouldn't that alone indicate that the cars you have at present will have a greater life expectancy than those? A. When you increase the allowance about 67% I think you recognize that fact, which I have done.

Q. Hasn't considerable salvage been experienced on cars returned in the past? A. I think they get some glass out of the windows which is nothing on the open cars, and they get out some parts and things like that.

Q. What did you get for the Birney cars? A. They sold for about $2500.00 a piece. That's 18 in one thousand and twenty-two. Those are the only cars that we were ever able to sell as I understand it. They are the only cars we ever sold. Those 18 you see there.

Q. Isn't the Company converting some old cars into

cars of different types? A. Yes, sir, but they are not in the valuation. We have some old open-car frames.

Q. But they are in your table, aren't they? A. No.

Q. In this table on page 23? A. No.

Q. Aren't there 110 of them in there? A. I don't believe so, I will check that up.

Q. Aren't the 105 double truck convertible, and 110 double truck open cars among the cars converted? A. The 110 open are in there, to the extent that the salvage we figured on them was worth about $1200.00 a car.

Q. Haven't those cars already shown a longer life than most of those in the table? A. Yes, they have.

Q. Won't their anticipated life be extended for approximately another cycle by their use in that way? A. We can't tell. You can't look forward enough to see. I think they will be extended, they certainly will be extended to some extent, and that's why I added my 67% on to the life to take care of it.

Q. Doesn't the ability to use cars in this way tend to offset obsolescence? A. Yes, it helps to offset obsolescence.

Q. The majority of the cars now in use were purchased before the war at relatively low prices, weren't they? A. I don't know what their purchase price was. I can tell you what their reproduction value is approximately.

Q. Do you know that the actual annual retirement of cars for the last 15 years has averaged $130,000? A. No, I don't believe it either, if you will excuse me for saying so. The average for retirements on the books might have been that.

Q. That's what I mean. A. I wouldn't be at all surprised.

Q. Doesn't that make the $725,000 claimed on page 23 seem large? A. No.

Q. Don't you think the books are right? A. No, I don't think they represent what's happening to us. I am no accountant, so it oughtn't to have any effect on anybody that does think they are right, but I don't.

Q. Which department of the Company do you think the Commission ought to place credence in that matter? A. I think the Commission ought to look over the facts we present and see whether they are facts, and if they are facts, or they indicate facts, I think the Commission ought to be guided by those facts, and not by any rule of anybody.

Q. Not even of its own rules? A. No, sir.

(Mr. Clark) Or your theoretical rules?

(The Witness) Or my theoretical rules. We want facts.

Q. Turn to page 25 of your study, power plant equipment, account No. 542, 3% is the annual depreciation estimated there, Mr. Hill, isn't it? A. That's right.

Q. And the Owings' Mills substation is 35 years old and still going strong, isn't it? A. Well I don't know how strong it goes. It's one of those items, I am frank to tell you we can only get from our general experience. I don't believe it's going strong, no.

Q. How old is it? A. I don't know. I will find out for you.

Q. Don't you know? A. No.

(Mr. Tingley) That's all.

CROSS-EXAMINATION (Continued).

By Mr. Sobeloff:

Q. Mr. Hill, I don't want to ask you any questions that have been covered by Mr. Tingley, but I am interested in one or two matters that you have touched on. In regard to this Mount Washington Bridge, what was the probable life of the bridge that was retired? A. Our Bridge expert told us that he recommended 2% on any bridge, and that coupled with our obsolescence is all that I gave you on that.

Q. Now how old was that bridge? A. I don't know that.

Q. What did you value that property at in your valuation? A. $87,000 and some hundred dollars, I think it

was. By the way, I didn't value it, it was valued by Mr. Pagan, our expert on that.

Q. What is the expectancy of this new bridge just erected? A. Well it isn't our bridge.

Q. Did the United Railways contribute any part of the cost to the new bridge? A. I don't know, but I don't believe so. No, they didn't and we are not claiming that either, and we have used up this out of our property.

Q. But Mr. Emmons referred to that as illustration of the heavy and unexpected expenses that the Company is put to. A. We have that much capital on the books, the cost of that bridge, whatever it is. We have got to do something about it. It's certainly heavy and it is unexpected.

Q. Do you think you are entitled to a credit for a bridge which was a burden to you? The charge on your maintenance account has been taken away and you now have a good substantial concrete bridge that you didn't contribute to the construction of and that you won't have to contribute to the maintenance of? A. Do you think if you are allowed a return on the value of your property devoted to the public use——

Q. Wait a minute, you are getting away from my question. You are setting up a maintenance reserve. I am asking you, Mr. Hill, how much you think your Company ought to be allowed out of this maintenance reserve or depreciation reserve in a case where, instead of having a bridge that cost you annually a large sum for maintenance and replace of parts, and painting and other items of that kind, you now have presented to you free of charge, at the expense of the taxpayers of Baltimore, a much better bridge on which you don't have to pay one cent to maintain it? A. And on which we are allowed to make no return whatever, or profit.

(Mr. Tingley) Why should you?

(The Witness) Because we haven't got it.

Q. You didn't invest anything? A. But we put up $87,000 originally and we are responsible to our bond holders for that, and it's gone in the public service.

Q. What did you have to pay annually to maintain the Mt. Washington bridge? Have you any figures to show that? A. I haven't any idea. That comes off expenses; it doesn't come out of the stockholders' pockets.

Q. Do you know whether the United Railways would be able to salvage any material amount of that bridge? A. I asked the Chief Engineer this morning and he said he didn't think he would get anything out of it at all. You have the labor, it will probably have to be cut down with an acetylene torch and carted away.

Q. Don't you think there will still be a substantial salvage above the cost of removal? A. No.

Q. Are you sure of that? A. Yes.

Q. Will the United Railways be willing to turn that over to the city as compensation for the present bridge? A. I wouldn't be at all surprised if they would. I can't make a promise for them, but I will find out.

Q. I tender the acceptance of the tentative offer now? A. If you don't mind me asking you, what will you do with it after you get it?

(Mr. Tingley) Put it in the valuation.

(The Witness) No, it's coming out of the valuation now, that's what bothering us. If you leave it in the valuation all right, and of course the cable road and that should be put back in too.

Q. As a matter of interest, I would like for you to find out for me, if you can, what it has cost the United Railways annually to maintain that bridge so we can determine how much it has been relieved of? A. Yes, I have got to qualify that to that extent, Mr. Sobeloff; I don't know whether we can tell you any more than to make an estimate.

Q. You know what it costs to paint it every year? A. We can determine that. We don't keep any separate account of cost on the Mt. Washington Bridge.

(Mr. Tingley) Will the books be accurate on that?

(The Witness) Oh yes, on the maintenance. I think

the question of maintenance on the whole item of bridges is shown on the books.

Q. Now in regard to the tracks that are unused, which I understand you estimate at 3½ miles— A. No, I estimate that we had taken out in the last eight years, removed 20 and a third miles.

Q. You say twenty and a third miles were taken out in the last eight years? A. Yes, sir.

Q. Now how much has been taken out since the valuation, as of December 1st, 1923? A. You can get it very quickly by adding up here on page 5 the item Edmondson east of 7th Street on down.

Q. Has that been taken off of your valuation? A. Oh, yes.

Q. And has it also been taken off in your computation of the proportionate part of your total trackage on which you pay a Park Tax? A. I guess if it's gone, we don't run over it.

Q. Do you know or are you just guessing? A. I don't know whether it's gone out of the Park Tax, but the Park Tax is paid on the question of mileage. Now, can you make mileage over track that's been taken up? A. That's exactly our contention. You can't make any mileage on tracks that are not being used, and yet it's computed in the proportion on which you pay your Park Tax, you take mileage in figuring the total trackage of the Company for all this unused track? A. No. Mr. Sobeloff, I think you are wrong.

Q. I think that's what Mr. Emmons said on the witness stand. A. We take credit, Mr. Emmons, can check me, we take credit for the mileage of the two different kinds, not for the trackage, we base it on the mileage the cars make and not for the trackage. We base it on the mileage the cars makes and no car makes mileage on track that's been taken up.

(Mr. Tingley) Or on track that's abandoned thru rerouting?

(The Witness) Well they might make mileage on aban-

doned track, that's possible, but it certainly is not possible here.

(Mr. Tingley) Is that why it's left in the easement?

(The Witness) What's left in the easement allowance my impression is that it very close to balances.

(Mr. Tingley) In other words, if it does not balance something ought to come out?

(The Witness) Absolutely, I agree with you and willing to take it out at $90,000 a mile, which is the value of easements.

(Mr. Markell) Out of $90,000.

(The Witness) The easements are worth $90,000 a mile, yes sir, and it ought to come out that way.

Q. Do you value the easement the same on Lexington Street, where you don't use the track as on Fayette Street, where you do use it? A. We use the track on Lexington Street. We don't use it much, it's used for the Mail cars, and we couldn't get into the Post Office very well without it.

Q. Do you consider that as valuable in your valuation as the valuation of the Fayette Street track? A. Yes, it's an interest in real estate, as I understand it.

Q. Regardless of the use to which you put it? A. I won't argue the law with you, I am no lawyer as you can readily see.

Q. I won't argue engineering with you, either? A. I will be glad to have you do that.

Q. Don't you recognize any decrease in your valuation between a situation like that on Lexington Street, where you have a track and you are making no use of it, or usually no use of it, and Fayette Street where the cars are running over it every fraction of a minute? A. We are told by the Court, as I understand it, that we could not include in the valuation easements any element of earning and if you don't include earnings, how do you include mileage? Again, I am arguing law and I apologize.

Q. Do you think a mile of track is a mile of track no matter where it is? A. A mile of easements.

Q. And an easement is equally valuable whether it's held useful or sporadically used? A. That's what I gather, that's what I understand, I don't know.

Q. Well, it would surprise me if that were the law? A. A great many things surprise me.

Q. I would be very much surprised if that was correct. A. I will go you one better, and say I don't know anything about it, Mr. Sobeloff.

(Commissioner Harper) Have you acquired an easement in the Mt. Washington Bridge?

(The Witness) That was private property and we haven't written it off yet, Senator.

(Mr. Tingley) Are your easements private property?

(The Witness) Private right of way I should say. No, I don't know whether they are or not.

(Mr. Tingley) I don't either.

(The Witness) Then, you have got to remember, Mr. Tingley, that my special easement counsel is on the high seas today, and I don't like to talk easements without him.

Q. What is the total amount of track valued that the Company has which is not used regularly but is in the same situation as this Lexington Street track? A. It's very small, it's less than 1%.

Q. You will get me that Mt. Washington Bridge figure, will you, Mr. Hill, as to cost of maintenance? A. Yes.

CROSS-EXAMINATION.

Br. Mr. Toole:

Q. I have only one or two questions. Mr. Sobeloff and I talked about bridges and so on coming down and he has asked all the questions that I would ask.

I want Mr. Hill to look at the table on page 8 and then count up the first column and ask if all his figuring and

facts are in the same relation to that same column? A. Have you found an arithmetical error? It does look to me that you have and I will make the same statement, that in all these cases we do the thing as accurately as we can.

(Mr. Markell) An error of $5.00 in $114,000.

(The Witness) We will withdraw that $5.00 and if you will show me another $5.00 I will take that out to. We should have over on page 29 $2,149,205.00.

Q. Is there anything else you want to withdraw? A. If there are any more $5.00 we will, sir.

CROSS-EXAMINATION (Continued).

By Mr. Clark:

Q. Mr. Hill, haven't engineers determined that for three or four cycles of replacements in a company such as yours that the volume or amount of replacements annually are not the same? A. Over a period of years, yes.

Q. After three or four cycles of replacements? A. I wouldn't imagine it would have to be that long. It would tend by and by to equalize. It would be like that cars, nothing for six years and then a big number would take place, and if you stand far enough off and use it you get about equal.

Q. And that is somewhat proven by the fact that for the past we won't go back further than eight years, your retirements costs have been about the same? A. You mean the retirement costs of the company?

Q. I mean the amount of retirement are about the same.

(Mr. Howard) You mean about the same each year?

(Mr. Clark) Averaging about the same.

(Mr. Howard) I think any period they average the same.

(The Witness) I wouldn't be surprised.

Q. We average about $800,000? A. What are you going to talk about? Are you going to talk about just track at present-day value?

Q. I am talking about all your depreciable property? A. You know, Mr. Clark, perfectly well that we have not put on the books any cars to amount to anything. You know the 1919 opinion of the Commission said that the fare they gave us didn't provide for any cars altho they think it ought to be taken off.

(Mr. Tingley) The fare the Company asked for?

(The Witness) No, the fare the Commission gave. But I don't consider that that has any relevancy there, because I think we produced the facts in this thing, that so many cars have gone out, and you have an average life of less than 16 years for those that have gone out, and for that we estimate a rate of retirement over a period of years of about a little more than one-half of what those figures indicate.

Q. You mean then that the Commission's allowances have not been sufficient to take care of your retirements needs or replacement needs? A. It certainly would seem so.

Q. As a matter of fact you have been able to take care of all of them and accumulate a reserve? A. No, not if you take those cars off, we haven't. You certainly have not accumulated any reserve that I can see.

Q. What is the million and a half depreciation reserve that you report— A. I don't report.

Q. To your stockholders? A. I try to do the valuation and find out what we need to keep up with what we got and that's about all I can do.

Q. You are familiar with the report of your Company to the stockholders? Have you read it? A. Yes, I have read it.

Q. You have I suppose examined the statement there made with respect to the depreciation reserve? A. I don't think I have.

Q. You have never seen it? A. I have seen it, but I haven't examined it.

Q. Do you know what the Company's depreciation reserve was on December 1, 1922? A. Have no idea. I

have tried to find out as I told you what we need to keep us here we are and no more or no less over a period of years. I have tried to bring the valuation down to date in a conservative manner.

(Mr. Tingley) This was a more or less sudden discovery, wasn't it, Mr. Hill?

(The Witness) What's that?

(Mr. Tingley) More or less a sudden discovery.

(The Witness) I think it became very sudden when you set up what your books were showing you and what you actually had to show the Commission to justify any rate of return.

Q. Weren't you surprised yourself at the fact that you found, or thought you found in obsolescence——

(The Witness) Over depreciation? Yes, indeed. I told you confidentially this morning that I was very much surprised at the obsolescence was of so much more importance than depreciation.

(Mr. Tingley) As I told you that confidentially I didn't believe it.

(The Witness) That's all right.

Q. Mr. Hill, we are very much surprised often when we compare theory with facts. A. Why, yes, the theory that our books showed us, against the facts that this thing showed us surprised us a great deal.

Q. And you would adhere to the theory rather than the facts, notwithstanding? A. No, I want to cut loose from the theory and get down to the facts, and let's keep the valuation and keep enough for our retirements.

Q. How do you charge for retirement jobs, costing less than a thousand dollars? A. I think they are maintenance charges. We kept them out of here.

Q. Does it make any difference in your account, in which account that charge is made? A. Why, no, as long as you don't set it up in your depreciation, it doesn't.

Q. What proportion of the total amount of retirements for the year in percentage come within the thousand dollar class, and are charged to maintenance rather than depreciation? A. Why there isn't a proportion. What goes to maintenance, goes to maintenance, Mr. Clark. It isn't considered a portion of depreciation.

Q. Do you know the answer to that question? No. You mean how much is in maintenance?

The exhibits show that.

Q. Do you know how much the proportion of the amount of retirements for the year, because of the thousand dollar rule are taken out of maintenance, instead of depreciation? A. No, maintenance of whatever it is, and depreciation we think is this much.

Q. Have you ever had occasion to investigate that as valuation engineer of the Company? A. How much maintenance was? No.

Q. No. I didn't ask that. A. You asked how much is charged to maintenance and——

Q. You told me and I think it's correct that if a retirement job is less than a thousand dollars it is charged to maintenance and not to depreciation, is that correct? A. No, I said anything less than a thousand dollars was considered a maintenance expense. That's right. Now if you want the amount of those two things, we can take this maintenance which is in our exhibits——

Q. If a job is less than a thousand dollars it's charged to maintenance, and not depreciation? Is that right. A. That's right.

Q. Then all the thousand dollar jobs must be in the maintenance? A. Yes.

Q. What proportion of the whole does that amount to? A. What is our maintenance? Oh, I can't tell you, Mr. Clark. What's in maintenance, is maintenance.

Q. If you don't know, just say so? A. I told you I didn't. But it's in one of these exhibits. Whatever is maintenance is that amount, and the rest of it is what you consider——

Q. Of course I have no doubt that all your maintenance charges are in maintenance, but I wanted to know what proportion of them represents replacements?

(The Chairman) Mr. Hill said he did not know.

(Mr. Clark) I haven't heard him say that. I wanted him to say he didn't know. I am surprised, being a valuation engineer, that he doesn't know. I thought he could answer that question.

(Mr. Tingley) Was that confidential?

(The Witness) I will apologise to you Mr. Tingley, for using that word confidential. It was not what I intended to use. I should have said informally, and I have never in the world had you betrayed my confidence of anything I said to you, which you could have used against me, and I should have said informal. I am very sorry I used it.

Q. Mr. Hill, according to your calculation of the needs of the Company, the allowance should be for retirements $2,200,000 a year instead of about $800,000? A. Approximately that.

Q. And that is arrived at by this theoretical study you have made of the past of this company? A. Theoretical on about 10% of it. It's practical when you get to those cars and track and so on, what's actually happened to us.

Q. Are you serious that you would ask this Commission to increase the rate burden of the people of Baltimore City in order to get a thing which has never appeared in practice? A. I am perfectly serious in saying that that's the amount of depreciation necessary to keep at where we are.

Q. And you are just as serious about everything else you have said today? A. I haven't said anything else.

(Mr. Clark) That's all.

(The Chairman) Senator Benson, do you wish to question Mr. Hill?

(Mr. Benson) Just a moment or two.

(The Witness) I don't know anything about Halethorpe, Senator.

CROSS EXAMINATION
(Continued).

By Mr. Benson:

&. Don't you think there is any depreciation on the Halethorpe line? A. No, according to you, it's operating 100% and the most profitable line we have got and we ought to have appreciation on it.

(Mr. Benson) I move that answer be stricken out as unresponsive.

(The Chairman) Strike it out.

Q. Mr. Hill, you do figure depreciation on the Halethorpe line, do you? A. As long as the line is operating in good condition, we have not figured it as depreciation. If there has been a retirement—but I don't think that there has been a retirement on that line.

Q. Then you figure retirements or depreciation on a single track line that's one half of what a double track would be? A. It's whatever occurs when the line goes out, it's whatever number of feet of track goes out.

Q. You just figured depreciation as retirement then alone? A. That's right, except in the case of buildings, and other things of that kind.

Q. And there has been no retirement on the Halethorpe line? A. There hasn't been that I know of.

Q. Now in your figures on depreciation for cars—you have those figures there, haven't you? A. Yes, sir.

Q. How do you figure those? By mileage or life of the car or what? A. Figure them by the life of the car. That is the number of the cars that have gone out, and the life would amount to about the same thing.

Q. Does the mileage a car runs have anything to do with the depreciation of a car? A. I don't believe so, Senator. I think that the proper maintenance will keep that car.

Q. Then it does increase the maintenance? A. Yes, I don't doubt that.

(Mr. Benson) That's all.

REDIRECT EXAMINATION

By Mr. Howard:

Q. When you were being cross examined, Mr. Hill, and especially with reference to the cars you were asked the question whether the entries on the books that were charged to the depreciation fund, didn't represent the actual loss of cars, and you said they did not? and I understood you to say that they didn't in two respects. Is that right; that in the first place the valuation at which they were retired there was not the real value, that's right, is it not? A. That's true.

Q. And then in the second place didn't you say there had been a great many cars actually retired that hadn't been entered on the books at any value? A. That's my understanding. You are talking about the books. I tried to do the same thing that I did with the easements. I am not an accountant.

Q. Your calculation is based on what have actually been retired, isn't it? A. That's right.

Q. And these things that you have been asked to check up, you will do so of course? A. As I understand it was the question of easements, what the net loss in easements was and the maintenance on the Mt. Washington Bridge.

Q. And also whether any wire is being used that has been charged off? A. Yes.

(Mr. Tingley) Wasn't there a tentative contract on the disposal of that bridge?

(The Witness) I don't believe so.

(Mr. Tingley) I thought the city was to take that over?

(The Witness) I hope so.

(The Chairman) Major Purcell says that the Bridge

was offered to the city and the city declined to accept it. It had no use for it.

(Mr. Sobeloff) As a bridge you mean.

(The Witness) As anything I suppose.

(The Chairman) Major Purcell can state it.

(Mr. Sobeloff) Mr. Noel told me this morning that he thought there was a substantial salvage in it. If the offer is still open I will get a quick ratification of it. Is the offer still open?

(The Witness) I can't give Mr. Emmons' bridge away without asking him.

(Mr. Sobeloff) We are interested. We don't think we will lose any money on it. We have already lost our $340,000 in the new bridge.

(Mr. Howard) You have a quicker obsolescence than we have then.

(Mr. Sobeloff) We don't have any fares to set if off, we have to set if off at once.

(The Chairman) Any other questions to be asked Mr. Hill by Counsel?

NOTE: No response.

NOTE: Examination concluded.

NOTE: The Commission then adjourned for the purpose of taking a short Recess.

Thereupon—

LUTHER R. NASH,

a witness of lawful age, produced on behalf of the Applicant, having first been duly sworn, according to law, was examined and testified as follows:

DIRECT EXAMINATION

By Mr. Howard:

Q. Mr. Nash, will you tell the Commission your name? A. Luther R. Nash.

Q. What is your profession or occupation? A. I am a public utility executive.

Q. Where are you now located and what are your present connections? A. In Boston, as the Vice President of the Stone & Webster organization.

Q. Now would you give the Commission briefly an idea of what your experience in such matters and what your training in such matters has been? A. I have been connected with the Stone and Webster organization for over 30 years. A graduate of Massachusetts Institute of Technology, a Post Graduate of Harvard University and was successively for Stone and Webster superintendent of construction, designing engineer, chief engineer, manager of public utilities, supervisor of public utility operations, appraisal engineer, rate expert, more recently consultation on taxation and franchise matters and valuation and subject of depreciation. With respect to depreciation, it's one of my regular jobs to determine or review the annual appropriations for depreciation as made by the companies, numbering about 60 which are under Stone and Webster management.

Q. Stone & Webster is a very large concern, isn't it? A. They manage these sixty properties more or less thruout the United States and in some foreign countries and do a very large amount of construction work. A substantial part of which is for public utility companies, for that we have a contract with operation, construction and also financing.

I might add that I am a member of the various national utility organizations and of Committees of those organizations dealing with public relations, rates, valuations, franchises, taxation, depreciation, particularly on a Committee of the Railway Association dealing with the subject of depreciation accounting in connection with the program of the Interstate Commerce Commission to expand its system of depreciation accounts.

Q. Is it your duty or your custom merely to keep yourself acquainted with those things that come before you in your own concern, or do you also acquaint yourself with the state or knowledge generally and with the experience and ratings of other people on the same sub-

ject. A. Why I keep in touch with, in a general way, as far as I can, all that goes on in the public utility industry of major importance.

Q. I believe you, yourself, have published a book on related subjects. A. I have published a book on the economic phases of the public utility industry and written various articles of valuation, depreciation, and various other economic phases of the business.

Q. Are electric railways and street railways included in the companies that came within your experience? A. They are. We have a considerable number under our management.

Q. Now, Mr. Nash, there are two things, I want to ask you about and I don't know that it makes much difference which I take up first. Suppose I take up first Mr. Hill's testimony and his report. You have heard his testimony, haven't you? A. Yes.

Q. And you have seen his report? A. Yes.

Q. And I want you first of all to tell the Commission whether from your knowledge and experience, you think Mr. Hill has gone about that the right way, and anything you have to say about the method he followed? A. His method is that which I follow as far as possible always. That is to base depreciation appropriations on actual history of the properties involved. Life tables I never had any more use for than was absolutely necessary, because they are a good many of them based on the published tables I refer to particularly, based on comparatively limited experience and I say where it's possible I prefer to do as Mr. Hill has done, study the particular properties that I am interested in, and determine their history and of course qualifying that as far as may be necessary by a consideration of the relation which the future may have to the past. Of course, that's all that is necessary, because rate cases are set up for future effectiveness.

Q. Now you of course had nothing to do with the preparation of Mr. Hill's work. He did that himself, didn't he? A. No, I only saw it very recently indeed.

Q. But you have gone over it with him since it was prepared. A. I have in a general way.

Q. What I want you to tell the Commission is how far you think the methods he had followed seem to be the sound and correct methods for the purpose in question. A. Why I don't feel that I could do that in detail, in any minute detail, at any rate, because I am not well acquainted with the property or its history, but his general method of taking costs where they are available, past costs, and of using percentages based on estimated life where necessary, I agree with and as far as life estimates are concerned, I find them without any exceptions that I now recall, consistent with what I believe to be good practice.

Q. Now the other branch of the subject I wanted to ask you about substantially the same thing from another view point. I want to ask you about the practice of other concerns, and what, judging from that is a proper allowance for a street railway Company for depreciation or rather for retirements on its depreciable property. Mr. Hill has figured out as his final result—he comes to a conclusion that is about 4% on the depreciable property of the Company. I want you to give the Commission the benefit of your experience and observation in that line. A. My experience has not been primarily concerned with percentages of depreciable property. In my organization our method has been to get up depreciation appropriations in a somewhat different way. We have been studying that question during my entire connection with the organization, and we have kept comulative records of experience of all of our managed companies. In the early days we had to devise some yard stick to which to apply. There were no valuations as such in those days, in fact the cost of properties in general were unknown, so we picked as a substitute the gross earnings as our basis of determining that, and our appropriations were fixed as a percentage of gross earnings, usually about 10%, depending on the type of property.

As it went on we found that that was not sufficiently accurate for our purposes because of the lack of a defin-

ite dividing line between depreciation and mantenance, so that be substituted a combination percentage of depreciation and maintenance together referred to the gross earnings of the properties.

Q. In other words, you found the most useful method of check one company by another was to add the maintenance and replacement charges, and see what ratio they bore to the gross income rather than to take either of these accounts separately, is that right? A. Yes. Not only useful, but it is the more practical method.

Q. Why was it more useful and more practical, in checking one company against another, to combine those two accounts, rather than to treat them separately? A. Because of the lack of uniformity in dividing up costs between maintenance and depreciation. Large properties will retire or renew much larger units of property charged to maintenance than small ones will, and if there is with the size of the property and with the character of the property, but a combination yields a fairly definite and comparative relation, not scientifically as accurate perhaps as a percentage of the physical property, but practically I think it is. There is so much uncertainty as to useful life, on which percentages are based that I am satisfied that the percentage that we use is a workable thing, and we have checked it in our experience of thirty odd years of operation and find that it does work.

Q. What is that percentage, Mr. Nash? A. For railway properties, nominal railway properties, about 25%. Light, power and gas are less somewhat.

Q. That is to say, according to your experience in order to be adequate, the allowance made for maintenance plus the allowance made for retirement ought to be about 25% of the gross income, is that right? A. 25% of a normal gross earnings or operating revenues.

Q. What do you mean by normal gross earnings? Do you mean when an adequate return is being made? A. Earnings which yield a reasonable return. That is railway properties of course many of them are not having adequate earnings and when their earnings are de-

ficient of course the depreciation and maintenance are still going on in substantially the same amounts, and correction must be made for that.

Q. You speak of railway properties, just what do you mean by that? Steam railroads? A. Electric railways, city and interurban systems.

Q. Have you yourself figured out approximately how your ratio applies to the $2,200,000.00 that Mr. Hill has figured for retirements and existing maintenance allowances of the United Railways & Electric Company of Baltimore? A. I have made some approximations, I mean adjustments, first with respect to the normal revenues of this property. I judge that the existing revenues are inadequate both because this case is being heard and because the showing of the company appears to be less than a normal return. Increasing revenues to an 8% return of the valuation, increasing taxes, depreciation allowance and some incidental allowances for further investment and possibly further service if it is needed, I have made a rough estimate of $20,000,000 as the normal annual revenues for this property.

Instead of applying 25% to it, I have given recognition to the fact that this property here does not have whole power supply facilities, in fact most of its power is purchased, and of course the earnings are just the same as if the power were generated and the facilities were available, and I have made allowance for that and reduced the percentage to 22 for this particular case.

Incidentally that is the percentage which we recommended in New York for the Surface Lines a considerable number of years ago which was approved by the Commission, surface lines, which bought, as I understand it, then a large part of its power as is the situation here.

22% applied to what I have estimated as the normal revenues shows a requirement for combined maintenance and depreciation of $4,400,000.00.

Deducting from that the normal maintenance expenditures of this company, and I have not taken 1926 or present rate of expenditure in particular, but have assumed, without knowing very much about it, a rough average of

the figures for about half dozen years and deducting them, this average from the total leaves an amount which is approximately the same as Mr. Hill has reached in his computations, about $2,200,000.00.

(Commissioner Harper) That would be about equally divided between maintenance and depreciation?

(The Witness) Nearly. Our general experience is that the two run fairly constant, but we ordinarily find depreciation a little larger.

Q. And you have already said, it depends very much on the individual bookkeeping of a Company as to whether it might throw a particular item into maintenance or depreciation, doesn't it? A. Very much indeed.

Q. And that's the reason you lump the two in making your estimate? A. But we found that depreciation alone of 10%, or what would be more nearly right for a railroad company, perhaps 12 is too indefinite. The practices of companies vary too widely.

CROSS-EXAMINATION

By Mr. Tingley:

Q. Mr. Nash, isn't it difficult to make an accurate estimate of the proper rate of depreciation for a company without making a personal study of its property and affairs? A. It is difficult, yes. What one must do in making any study is to determine first whether the property in question has appearances of being normal and reasonably consistent with the run of such properties of that general character.

Q. Would you say that this property appears to be well maintained? A. I have not seen enough of it to testify usefully, I think, with respect to that. Superficially what I have seen has been cars, that's about all and they seem to be well maintained.

Q. Have you seen enough of the property to be able to estimate its percent condition? A. No.

Q. As I understand it—all you have done is to check what you understand to be Mr. Hill's general method of having taken the experience of the Company as to its

retirements as a guide to what it will need in the future for retirements, and you have checked that method and found without checking his particular computations and estimates? A. Yes, and I have checked his results with what I think they should be on a property of this size and character, as I see its character in a general way.

Q. Now of the 60 more or less properties, that Stone and Webster manage, how many of those are street railway properties? A. Street railway properties or departments, I can't give you the exact figure, but somewhere nearly one-third. Perhaps 15 or 20.

Q. 15 or 20 street railway properties? Can you name them? A. If you would like that list, I can get it for you.

Q. Yes, I would like to have it. A. Baton Rogue, Electric Company.

Cape Breton Electric Company, Novia Scotia.

Q. These are all street railways? A. Street railway companies or having street railway departments.

Columbus Electric & Power Co., Georgia.

Eastern Texas Electric Company.

El Paso Electric Railway.

Galveston-Houston Electric Railway.

Galveston Electric Company.

Houston Electric Company.

Jacksonville Traction Company.

Jamaica Public Service Company, British West Indies.

Northern Texas Traction Company.

Tarrant Traction Company.

(The Chairman) What state is that?

(The Witness) That is in Texas.

Pudget Sound Electric Company.

Pacific Northwest Traction Company.

Tacoma Railway & Power Company.

Savannah Electric Company.

Tampa Electric Company.

And there are a few other incidental minor railways involved in some of these companies which I haven't mentioned, but those are the principal ones.

Q. What is the rate of return being earned on its valuation by the Baton Rouge Company? A. The Baton Rouge Company has never had a valuation fixed by the Louisiana Commission so that I can't answer your question.

Q. What is the fare there? A. The fare is five cents.

Q. The Cape Breton Company, what's the rate of return being earned there? A. The answer to that is the same as to Baton Rouge. Wait a minute though. I think the valuation has been fixed by the Novia Scotia Commission.

Q. I am referring to the valuation of the street railway part of the property in each case. A. I understand. I can't tell you what is being earned on that valuation, but I am confident that it is less than a fair rate of return.

Q. What would you call a fair rate of return? A. Under the law in Novia Scotia 8 per cent. is the minimum return.

Q. I mean under the law of Maryland. A. I don't know that there is any law in Maryland.

Q. What fare is being charged in Cape Breton? A. I think it's 7½ cents or 8 and 7½ cents, but I am not sure of that.

Q. What return is the Columbus Electric and Power Company of Georgia earning? A. That I can't tell you because that is a combined railway and electric and gas property.

Q. What's the fare being charged? A. I think seven cents while there may be a ticket rate slightly less.

Q. What return is the Eastern Texas Company earn-

ing? A. That I can't tell you. That's a combined property.

Q. What's the fare there? A. Either seven or eight cents, I don't remember which.

Q. What return does the El Paso Company earn? A. That is not known.

Q. What is the fare in El Paso? A. I think seven cents.

Q. How about the Galveston-Houston? A. That has never had a valuation and its return is below normal. Just what I don't know.

Q. What's the fare? A. That is an interurban line with a mileage system of fares.

Q. How about the Galveston Electric Company? A. The Galveston Company I think is charging six cents and is seeking a higher fare at present.

Q. What return is it earning on its valuation, do you know? A. I don't know.

Q. How about the Houston Company? A. The Houston Company has a seven-cent fare, had a valuation fixed in the Federal Court two years ago. Incidentally in that case the Court approved a 4½ per cent. division on that valuation for depreciation after a very exhaustive study of the history of the Company going back to the very beginning in its electric operations, and 8% was accepted by both sides as a fair rate of return.

Q. Is it being earned? A. I don't think it is at the present time.

Q. I am sure it isn't. How about the Jacksonville Traction Company? A. Jacksonville has never had a valuation, and just at the present time, like any other utility in Florida, it is not earning a fair return upon its value.

Q. What is the fare in Jacksonville? A. The fare is ten cents cash, five tickets for 35 cents and a weekly pass. I am quoting all these from memory and I may not be quite right in some of them, but that's my recollection of

it. There again is a case of a company wherein or subsequent to a fare case, where before the Florida Commission a value was not fixed, but depreciation charges were prescribed, the interstate method prescribed and was followed strictly by the Commission, and a combination of maintenance and depreciation on that company since this order has been observed has been 26.2 per cent. of the gross earnings.

Q. What is the Jamaica Public Service Company earning on its property? A. I can't tell you.

Q. Do you know the rate of fare there? A. I don't know much about that property. It's a zone system, an English system of zone fares beginning at I think two pence.

Q. How about the Northern Texas Traction Company? A. That is a combined City and interurban system operating without a valuation.

Q. What is the fare there, do you know? A. The fare is a combination of ten cents cash, a weekly permit system under which passengers pay a certain small amount, I have forgotten what it is, I think somewhere around 25 to 35 cents plus a nickel, and there is an intermediate group ticket rate that I can't give you. That is a schedule that's been in effect for about six months.

Q. How about the Tarrant County Traction Company? A. That is an interurban line that I can't give you any very definite information about.

Q. How about the Puget Sound Electric Railway? A. That is an unfortunate company, not earning a fair return, although it had a valuation made a good many years ago.

Q. How much is it earning? A. Per cent.?

Q. Yes? A. I should say if it's as fortunate now as it has been for some little time about zero. Very intense automobile competition, bus lines and steamboat lines and everything else.

Q. What's the fare of the Puget Sound Company? A. That is a ticket system of varying rates. It's an interurban line between Seattle and Tacoma.

Q. How about the Pacific Northwest Traction Company? A. That is another interurban line that I have no very definite information that would be helpful.

Q. How about the Tacoma Railway and Power Company? A. That is not earning a fair return.

Q. How much is it earning? A. I can't tell you. It now has fare readjustments and franchise readjustments under negotiation with the City.

Q. What is the fare there? A. I can't tell you what it is at the moment. There have been various changes of prior fares, in fact they have been changed so frequently that I haven't kept in touch with them.

Q. How about the Savannah Electric Company? A. Savannah Electric Company is a railway department of a combined company having a seven cent fare.

Q. Fifteen for a dollar, isn't it? A. I think so.

Q. How about the Tampa Electric Company? A. Tampa has the old fashioned five cent fare still.

Q. Mr. Nash, do you know of any other public utility field where you could find a group of utilities like that where so large a percentage has never had a valuation made and the remainder were not earning 6 per cent. on the valuation? A. I don't think I quite understand your question.

Q. Do you know of any other character of utility where you could take a group of utilities like that and find so many where no valuation had ever been made and that as to the rest they were not earning 6 per cent? A. As far as valuation is concerned, I don't think there is very much difference as to classes of utilities. It may be that there have been fewer valuations of railways but I don't think that's true. As far as their earnings are concerned undoubtedly they are the least profitable of the public utility groups.

Q. Very few of them are earning 6 per cent., are they? A. Comparatively few.

(Mr. Tingley) That's all.

CROSS-EXAMINATION (Continued).

By Mr. Clark:

Q. Mr. Nash, I won't bother you long. I don't want to repeat any more than is absolutely necessary. You have served in the capacity of an expert for utilities for how many years? A. Well, as an expert, I suppose about fifteen or a little more.

Q. Your services as an expert have been confined to employment by utilities hasn't it? A. I think so. Practically so any way.

Q. There are some experts over the country who take the public viewpoint and testify for public bodies aren't there? A. I have heard a number of such.

Q. And the experts for the utilities and the experts for the public differ in many instances, as high as 25 and 50 per cent. in their conclusions? A. That depends on the experts. Some experts serve both sides and testify the same way. There are some whose opinions are quite as wide apart as you have stated.

Q. You mean to say that some of them testifying for both the public and the utilities at one time, bring down conclusions to suit the purposes? A. Why they bring down what they think are facts.

Q. Do I understand you to say that they change their methods depending upon whom they are employed by? A. Not at all.

Q. But experts do disagree to a very large percentage depending upon the employment? A. Why experts and other people disagree. The disagreement is not confined to experts.

(Mr. Howard) The question was depending on who employed them. Is that applicable to you?

NOTE: Question here reread by Reporter.

(The Witness) I misunderstood the question. That is true of some experts. There are some also of which it is not true, of course.

(Mr. Clark) I think that's all, Mr. Nash.

CROSS-EXAMINATION (Continued).

By Mr. Toole:

Q. Mr. Nash, has any of these companies that you mentioned gone through a receivership? A. I think one.

Q. Which one? A. Jacksonville Traction Company.

Q. What's the fare there? A. That's in the record.

Q. Ten cents, wasn't it? A. Ten cents with a weekly rate and a ticket rate in between.

Q. Is it out of the hands of a receiver now? A. Yes.

Q. Did that help it any going into the hands of a receiver? A. Why it depends upon what you mean by help.

Q. I mean weren't their finances better when they emerged? A. Than they were when they went in?

Q. Yes. A. They had more cash in their pocket if that is a measure of help, and there may have been other ways in which they were better off, but of course a receivership was simply a procedure for the protection of certain creditors that couldn't be paid at the time of the receivership. There was no reorganizing affected.

Q. How long were they in the hands of a receiver? A. Oh four or five years.

Q. And when they emerged was their rolling stock or equipment in better condition than when they went in. A. I couldn't tell you. I don't think there was any substantial difference.

Q. As a rule when a company goes in the hands of a receiver and stays there a long while is their equipment better or worse when they emerge? A. I would say it depends on the receiver.

Q. What is the custom? A. I don't know of any custom.

Q. You are not an expert on receivership? A. No sir.

Q. About Tacoma, is that the company that manu-

factures its own electric power? A. It manufactures a part of it and buys hydro power from other companies.

Q. Buys electric power? A. Yes.

Q. What does it manufacture? Steam? A. Yes.

Q. And can you recall now just from where it gets its power? A. Its hydro power you mean?

Q. Yes. A. From a group of plants in the State of Washington. Do you want them named?

Q. No, not exactly. I just want to get the nature of the plants. A. They are high head electric plants.

Q. Do they buy directly from these kind of super companies? A. The Tacoma Company buys from an affiliated company.

Q. And where does it buy from? A. It owns and operates the plants.

Q. Then there is no intervening company between the manufacturer and the Tacoma Company? A. I don't think there is in that case.

Q. In any of these other companies that you have mentioned, is there any intervening company that handles the electricity? A. I don't recall any.

Q. There is no company intervenes in all of those companies? A. If you want me to answer carefully that question I will take time to look it up, but I don't recall any cases that are significant at all.

Q. I don't want to give you too much trouble. A. I don't recall any, and I shouldn't attach any significance if there was.

(Mr. Toole) That's all.

RE-CROSS-EXAMINATION.

By Mr. Tingley:

Q. How many of the companies that are being operated by Stone and Webster are being allowed 25 per cent. for depreciation and maintenance? A. The companies operating under regulation where allowances have been

definitely fixed are very limited. I think I have mentioned already those that are fixed, that is, Jacksonville and Houston. I didn't mention Galveston where 4 per cent. was authorized. That was a court authorization, Federal Court again. I don't think other cases, where we have gone before commissions, I don't recall any where definite rates have been fixed. Some of the commissions have fixed fares, but without fixing either valuation or rate of return or depreciation provisions.

Q. In Houston the allowance is very much smaller, isn't it? A. 4½ per cent on the depreciable property.

Q. Which do you think is the sounder basis of computation? The valuation or the gross earnings? A. As I stated the gross earnings has certain practical advantages.

Q. For comparative purposes? A. Not only for comparative purposes, but for an automatic adjustment of the appropriations to fluctuations in business. That is a real advantage to the credit of the Company and its ability to get new money and expand. The percentage of property is fixed and it goes on just the same whether the business is good or bad or what, and it is, as I stated, based on estimates of useful life which are sometimes not dependable.

Q. Which is the method that you would say is more generally prescribed by commissions at the present time. A. The commissions more generally have adopted the percentage of property method. Both methods are used. That is a percentage of gross for combined maintenance and depreciation, percentage for depreciation, and in the case of allowance per car mile, which is quite similar to the gross earnings method, and in the case of gas and electric companies percentage of units of output. They are all in use, but as to the preponderance I think it is true that a percentage of property is more commonly used.

Q. And when you speak of percentage of property you mean that most of them use the original cost basis? A. I don't know about the original cost basis.

Q. Very few of them use the valuation basis? A. I don't know whether that's true or not.

Q. Aren't Galveston and Houston the only two that do in that group that you cited? A. Those are the only cases where percentages were applied to property value, and both of them were to appraised value. As to the propriety, your question is leading to that,——

Q. I will be glad to have you discuss that. A. Applying that it seems to me the rate base is the only logical thing to which to apply these percentages. I don't mean there may not be book accounting carried on on a different basis, that is, if the book value of the property, its fixed capital has not been recashed in terms of valuation and to agree with it, then as far as the books are concerned a piece of property that is retired ought to be written off at what it stands on the books and new property added at what it costs, and that in time, with increase in prices, and sustained higher prices would mean that if the appraised value is higher than the book value that the book value would gradually grow up to consistency but for purposes of rate making the appropriation must be based upon the rate base, otherwise if a piece of property is replaced in kind and it happens to cost more than the old added investment would be required without any change in rate base.

Q. That always has been the practice, hasn't it? A. What has been the practice?

Q. It always has been the practice in the past to retire at original cost and to meet any increase in the cost of the replacement to take that out of new capital hasn't it? A. That was the case of course back in the days when book cost or the actual cost and appraised value were fairly in close agreement. It didn't make very much difference and the question wasn't raised.

Q. Isn't it still generally the case? A. I think probably more as far as book accounting is concerned that that is the practice, in fact, it is the prescribed practice by the Interstate Commerce Commission and State commissions, but as to cases of rate case practice, where retirement appropriations are in question, I don't recall reading a single case where that has been carefully considered, and it's my business to read all the cases, I don't recall any where that point has been carefully argued

and that the cost basis of retirement rather than the replacement cost has been required for rate base purposes.

Q. If the cost basis has been required would you have considered the case carefully considered? A. I should think it would have been illogically considered.

(Mr. Tingley) That's all.

RE-CROSS EXAMINATION (Continued).

By Mr. Clark:

Q. Mr. Nash, another question please. I heard you refer to only one of these twenty companies seeking an increase in fares. Does that mean that there are no other companies in the group seeking an increase? A. No, I don't think so.

Q. In other words, there is only this one company seeking an increase? A. I don't know what that company was.

Q. That's the Galveston Company? A. Houston and Fort Worth have just had increases this year, and——

Q. I am not speaking of past increases. I am speaking now of pending applications. A. Well, if you are referring to the fact of increases, what's happened just recently is just as significant as what's going to happen in the future. I am trying to get your mind on what you are driving at, that's all.

Q. My question indicates what I am driving at, namely, how many companies now have applications for increases pending?

(Mr. Howard) You mean of those that he has been testifying about?

(Mr. Clark) Yes.

(The Witness) I can't tell you. The Tacoma Railway and Power Company I am sure, as I said, has its rates under trial, adjustments, and is trying to get to a satisfactory solution of an unprofitable situation, and whether there are others I don't just at the moment recall.

Q. Now how many of these companies in this group are earning as high as 6 per cent.? A. In most cases I said these are very largely combined companies, railway departments tied in with other branches of business, electric power or gas or something else, and further they haven't had valuations, most of them. What the railway departments are earning exactly is not known. But I would say that comparatively few of them are earning more than 6 per cent. There are some that I know are, but comparatively few. These are, as I say, most of them combined companies, and the operations of the combined companies are reasonably satisfactory, and in certain specific cases there has been a definite agreement between the company the community that they would rather have other rates raised where higher car fares are needed and have the car fares let alone. That's true in two cases where five cent fares are in effect.

Q. Isn't it a fact that not one of these companies is earning as much as a 6% return on book value or commission value as the case may be? A. No, I don't think so. Now Jacksonville, if I remember rightly, this last year has been a rather unfavorable one in Florida, but the year before Jacksonville did earn about eight per cent. on commission value. Well, it wasn't a commission value, but on a value that I think a commission would agree to.

RE-CROSS EXAMINATION (Continued).

By Mr. Toole:

Q. Let me ask you another question, Mr. Nash. I think you testified that you were associated with the Railway Owners Union? A. No, I don't belong to the Union. I am non-Union man.

Q. What I want to get at is this. You also testified that you were on a lot of commissions? A. Committees.

Q. Now is there any effort among this organization of electrical railway owners of a general organized movement to raise prices? A. I never heard of any. You say organized movement?

Q. Yes? A. I know of no organized movement.

Q. Is there a central point? A. No. The only centralizing that I know of is this. These railways, the most of them, belong to the National Association, and if they want information or statistics the smaller companies I speak of particularly bearing on their cases, or some of them, get statistics from the National Association instead of writing all over the country.

Q. I didn't mean your fifteen companies. I mean railways generally. A. I am speaking of railways generally.

Q. Now one more question, Mr. Nash. Do you think that motor coaches are making any considerable inroads in the business of the railway companies?

(Mr. Howard) You mean motor busses?

(Mr. Toole) Motor busses.

(The Witness) Are you speaking of in general? Both city and interurban?

Q. We will take first interurban? A. The interurban busses have made considerable inroads in interurban passenger revenues. Decided inroads.

Q. Now how about urban? A. Not so much in urban, but of course there have been a good many cases where city revenues have been reduced substantially by bus operation. In recent years that hasn't been as much because of regulation of busses, recognition that a local common carrier business ought to be in the hands of some one organization responsible for all of it which will permit co-ordination and all the advantages of minimum cost; that competition is, on city lines, gradually reducing.

Q. If there were no such regulations, suppose the different commissions would not regulate bus traffic and allow any individual to start a bus business, go into the passenger business, what would be the effect on the street car lines? A. Logically it would be reduced.

Q. Do you think they could subsist if individuals were allowed freely to engage in the carrying of passengers

by bus? A. On an economic basis they would most certainly be the one to survive instead of the busses, in any large city. In a small city, it's a question, but in a large city the economical logical basis of mass transportation is the street car or service on rails at any rate.

Q. Would you consider that to be true if a large bus company would start and give transfers and going over the city exactly like the street car? A. I most certainly do think so; that the railroad transportation is the backbone of large city service.

Q. It has been in the past of course, but now I am talking about this other thing that has never been tried yet. A. It has been tried.

(The Chairman) Mr. Toole, will you kindly inform the Commission how this line of questions is expected to help the Commission to determine whether the United Railways is entitled to an increase in fare?

(Mr. Toole) I want to find out if the United Railways had competition, if it wasn't protected by the Commission, I want to put it on the same basis as other business where it would have to compete, I want to see whether it would exist or not.

(The Chairman) I don't think that would help the Commission. The Commission is of the opinion that if there was indiscriminate bus competition, unregulated indiscriminate bus competition that the revenues of the United Railway would be so cut into that it would in a short time be in the hands of a receiver unless this Commission should authorize such an increase in fare as to keep it on its feet.

(Mr. Toole) That's what I was trying to find out. That's all, Mr. Nash.

(Mr. Sobeloff) No questions from me.

(Examination concluded.)

Thereupon—

W. FINDLAY DOWNS,

a witness of lawful age produced on behalf of the applicant, having first been duly sworn according to law, was examined and testified as follows:

DIRECT EXAMINATION.

By Mr. Howard:

Q. Mr. Downs what business or profession are you engaged in? A. Why I am vice-president of Day and Zimmerman, Incorporated, of Philadelphia, engineers and operators.

Q. Day and Zimmerman you say are operators. Is their line of business similar to that of Stone and Webster? A. Yes, sir, I would say so.

Q. And both of you manage properties? A. Yes, we manage properties, and we build all we can get to build in the construction line. We investigate other properties, both public utility and industrial.

Q. And Day and Zimmerman is a firm or concern that has been engaged in that for some time, hasn't it? A. Yes, for about twenty years.

Q. And upon a large or a small scale? A. Well, we are getting larger all the time.

Q. You are one of the largest in the country? A. I don't think so. We are not as large as Stone and Webster, I don't believe, but maybe the both of us together are the largest.

Q. What are your own personal qualifications and experiences for that sort of work? A. I took the Lafayette College civil engineering course and then I took a special course in mechanical engineering at the Massachusetts Institute of Technology after I had worked several years, and then I have been in the operating end, some years with the United Gas Improvement Company, and on construction work out in California. I have also been in a good bit of appraisal work. I was three years

as assistant engineer of the Pennsylvania Public Service Commission. I was on one of the railroad valuations of the Atlantic Coast Line. I have been with Day and Zimmerman since 1919, and I have had charge of a good many phases of their activities, part of the time in connection with street railways and interurbans.

Q. So the operation of such utilities and the valuation of them has been a large part of your work, has it? A. Yes, and in connection with reporting on all utility properties, the principal experience of which I got at the Commission in that end, and subsequent to that Commission experience. I am not responsible for all the investigating work of Day and Zimmerman as it applies to utilities and industries.

Q. And does that include street railway companies and electric railways? A. Yes, sir.

Q. Now, Mr. Downs, I am going to ask you the two main questions I asked Mr. Nash. In the first place you heard Mr. Hill's testimony, haven't you? A. Yes.

Q. And you have been over his report? A. Yes, sir.

Q. And you know the methods he has followed in that? A. Yes, sir.

Q. Now I want you to tell the Commission whether from your knowledge and experience you would say that Mr. Hill has gone about that in the right way or not? A. Why, I think he has.

Q. What has he done? A. He has endeavored to get a picture of what has happened to this property in so far as he was able to find it, as I understand, and in particular he has, as I understand it, eliminated from his calculations that part of several questions of depreciation, mainly maintenance, he has taken all the maintenance and treated it as maintenance, as a matter of fact he hasn't treated maintenance at all, but in treating depreciation he has allowed, as I understand it, for the salvage of retired units that have taken place in the past, and he has also eliminated maintenance from the question entirely and has based it on the history, as I understand his report, for about perhaps 80 or 85 per

cent. of the property involved, and the rest of it he has based on a life basis, an estimated life of the unit.

Q. In your opinion is that a sound method and the method best adapted to get the correct result? A. I think it is. I think the history of the past and the conditions over that period should control one in providing for depreciation in the future, at least until such time as a situation would develop where that history would not be proved out, and what I mean by that is it would be a controllable thing by the authorities in control and go along with the history as experience in the future. There may be adjustments to make in it one way or the other up or down.

Q. Of course the whole subject of such a thing is to show how much a year is needed to keep the property in its present condition, isn't it? A. Absolutely.

Q. That's the purpose? A. And his object is confined solely to the property as it exists as valued by the Commission as I understand it. He, I believe, properly assumes that there will be no extensions to this property of very great magniture. If there are it depends on the character of those extensions and where they fit in on a program of depreciation as to the extent they would be provided for.

(Mr. Tingley) He doesn't contemplate retirements either, does he?

(The Witness) Oh, surely.

(Mr. Tingley) Of track, I mean.

(The Witness) Oh, surely.

(Mr. Tingley) I mean curtailment of the amount of track.

(The Witness) Only what has been shown by the past history of abandonment which I understand is about 2¼ miles a year which may come from different causes, public authorities of various sorts, changing conditions due to traffic or due to demands of the public in general for improvements.

Q. Now Mr. Downs your work that you have been en-

gaged in has brought you in touch more or less, hasn't it, with the practice of other companies and a general knowledge on the subject of what are proper or adequate allowances for retirements as well as maintenance? A. Yes, sir, I would say it had. I have seen a lot of them.

Q. I want you to give the Commission in your own words the benefit if your experience in that line with reference to companies that are of a character comparable with that of the railway here; what, according to your knowledge, has been found to be an adequate allowance to cover necessary replacements? A. Well, first, I think that very few companies have themselves known what was adequate, but when they commenced to dig in and find out my experience has been that it's a great deal more than what they have been appropriating from their earnings to meet the retirements of their property.

Q. In other words, they have generally underestimated it until experience showed them the mistake they are making, is that right? A. I think that is generally true. Of course, while they were going along and making money, and it wasn't a question of the value of the property, or rather the value of the property had not been ascertained, it didn't appear to them to be a serious matter at all.

(Mr. Markell) Seemed to be making money.

(The Witness) Yes.

(Mr. Tingley) That's just a suggestion.

(The Witness) Of course, that's obvious. We know they are not.

Q. Now my question was to give the Commission the benefit of your experience as to what rates had been generally found to be adequate for that purpose. A. Well in all the studies that I have made and in the experience of the properties that I know of as a result of such studies, and the experience on the relatively few properties that we have anything to do with from the standpoint of management —

Q. By relatively few you mean as compared with the vast mass of existing properties there is, don't you? A.

Yes. We don't manage very many railways. We try to keep away from it.

(Mr. Tingley) Why, Mr. Downs?

(The Witness) Because they are as a rule very difficult to get proper rates of return on the investment that is in them or on a proper valuation. But my experience has shown that when you analyze this thing from the standpoint of depreciation that around about 4 per cent really is the way most of them work out. Now they all don't get that in a valuation proceeding.

Q. You mean 4 per cent of the depreciable property, or 4 per cent of income or what? A. No, 4 per cent of the depreciable property.

Q. That would mean that about one-twenty-fifth of it on the average goes out each year, doesn't it? A. That's right. There have been several allowances of that nature by commissions in determining the total cost of service and in fixing the rate of fare.

Q. What do you mean of that nature? A. Around about 4 per cent of the depreciable property. They have applied it, it is true, in terms of dollars which in my judgment it always ought to be figured to avoid the confusion of percentages, but a good many of those I have had something to do with the amount allowed for depreciation in determining the total cost of service, and then in fixing the rate, it was about 3 per cent of the total valuation found by the commission.

Q. Including undepreciable property? A. Surely. Three per cent of the total.

Q. And that was the equivalent you say of 4 per cent of the depreciable property? A. Just about, yes.

(Commissioner Harper) How many of companies you know of combine maintenance and depreciation?

(The Witness) I think as a matter of business practically all of the companies combine maintenance and depreciation from their own operating records in appropriating from earnings the amount to take care of maintenance and depreciation. I think the majority of them do that, because they want a flexibility in that thing in case

they get into a particularly bad year they can stop their appropriation for depreciation and pay their bond interest, because surely the bond interest shouldn't be defaulted in just for one bad year when the depreciation can be side stepped.

Q. You heard Mr. Nash's testimony about a combination of maintenance and replacement allowance or depreciation furnishing a better basis for comparison between one company and another than merely to take the allowance that was nominally for depreciation or replacements. You heard that, didn't you? A. Yes, sir.

Q. Do you agree with Mr. Nash generally ? A. Oh, I think it's better from the standpoint of the man that's operating the property, yes sir, but I do think that the rate to determine it in the first instance is on the basis of the experience of the particular company in its retirements, and obviously that has nothing to do with the gross earnings in determining its retirements of physical property, but from a business standpoint it's much better to have it in terms of a total percentage of the gross earnings, I think, in appropriating from the total revenues an amount to take care of maintenance and depreciation.

Q. Looking at it in that way, a combination of the two, what would be the usual percent of gross of gross earnings, assuming that the gross earnings were adequate, to allow a proper amount for both maintenance and depreciation in the case of street railway companies? A. I think the same way that Mr. Nash does; that it runs about between 20 and 25 per cent of the gross earnings when such gross earnings are, as he calls it, normal for a particular property. Of course, it may be 40 per cent on some companies.

Q. That is the same when you say about 4 per cent on the property to be replaced is the standard allowance? A. Yes, that's right.

CROSS-EXAMINATION

By Mr. Tingley:

Q. When did you first see Mr. Hill's report, Mr. Downs? A. Why I would say that I saw the first draft of it three or four weeks ago.

Q. It bears date of October 25th. Did you see it before that time? A. I saw it three or four weeks ago, the original copy upon which the amount as contained in that report for the total depreciation is set forth, namely around $2,000,000.

Q. Have you personally checked the report? A. From what standpoint?

Q. From the standpoint as to the correctness of its results or just the correctness of the general methods pursued. A. Only from the standpoint that I think it is the proper way to approach it.

Q. But you haven't checked the detail of it?

(Mr. Howard) Haven't checked it up with the books, you mean?

(The Witness) Oh, no.

Q. When you say that 20 to 25 per cent is a proper allowance for maintenance and depreciation for a company, do you mean that that is typical of what is generally allowed companies? A. In a way it's typical of what's allowed them, but it's more typical of what their expense is.

Q. More typical of what they ought to have? A. Well what they get and what they ought to have is an entirely different thing.

Q. Do you recall that Mr. Zimmerman of Day & Zimmerman, in Case No. 1682 in 1919, also advocated that the depreciation allowance be sufficient to retire property at replacement cost instead of original cost? Are you familiar with that? A. I wasn't here then.

Q. Do you recall that the Commission said that case: "The Commission is not prepared at this time to accept the claim of the railway company that its depreciation reserve should be increased in order to meet the increased cost of renewing and replacing property in kind. The contention of the railway company involves a distinct departure from the long established practice with respect to the handling of this matter, the accounting rules of this Commission, as well as the accounting rules of most other regulatory bodies (so far as the Commission is in-

formed), providing that the difference between the original cost and the cost of renewal or replacement, where such latter cost is higher, should be charged to capital account." A. The valuation hadn't been fixed then.

Q. No the valuation had not been fixed. A. That makes all the difference in the world.

Q. If that valuation had been fixed do you think the Commission's answer would be different? A. I can't answer for the Commission.

Q. Do you think the rules differ for companies whose valuation had been fixed by a commission? A. The allowance for depreciation, yes, absolutely.

Q. Do you think that the method pursued by this Commission in determining the allowance, that is taking valuation or original cost as the base, do you think that that's different from the case of companies whose valuations have been completed? A. Yes, I know of several where the allowance for depreciation has been given to the Company on the basis of providing for the dollars to replace the units of property.

Q. By this Commission? A. Oh, no. I didn't undertake to say by this Commission.

Q. What is the highest rate of return of any of the street railway companies managed by Day & Zimmerman? A. Oh, I would say about three per cent.

Q. Have buses been substituted for street cars on any of the lines in the last few years? A. They have been put into operation from the standpoint of feeding the existing transportation system.

Q. They haven't been substituted for any of the existing systems? A. Not for systems, no.

Q. Do you think that bus operation will in the near future replace the street railway? A. How do you want me to answer that? Generally?

Q. Yes, generally. A. Oh, I think it will in a good many cases, small companies, but I don't think it will in a big city.

Q. How do you think that tendency will be affected by

increasing the street car fare to what the bus fare usually is? It will accellerate it, won't it? A. Why it may from one angle accellerate it.

Q. Is it the policy of Day & Zimmerman to substitute bus operation for street railway operation wherever they go? A. Your questions are awfully broad. Do you mean wherever they go?

Q. Yes. A. It's only their policy to substitute bus operation in connection with the street railways that we have to improve the service and to make more money.

Q. Are they considering at the present time as to any of the managed properties replacing street railway operation with bus operation? A. Entirely?

Q. Yes. A. No.

(Mr. Tingley) That's all.

CROSS-EXAMINATION (Continued).

By Mr. Clark:

Q. Mr. Downs, how many electric railway companies are being operated or managed by Day & Zimmerman? A. Oh, eight or ten.

Q. How often do you serve in the capacity of an expert along this line? A. I am not an expert.

Q. You are not qualifying today as an expert then? A. I don't like the word expert.

Q. Neither do I. A. You have heard the definition of an expert, haven't you?

(Mr. Tingley) There are several definitions. You mean the one about the fellow that fools with figures?

(The Witness) A person that concentrates more and more on less and less until he finally dis-concentrates.

Q. I haven't heard that one. Do I understand you, Mr. Downs, that there is a tendency to combine, from an operating viewpoint, to combine maintenance with depreciation? A. I don't know that there is any tendency towards it. It has always been that way. In making appropriations you mean to provide for maintenance and depreciation?

Q. Yes. A. I don't think there is any tendency towards that. I think that's the way it was always done from the standpoint of the operator.

Q. Is there a tendency today among the utilities to seek an allowance for depreciation to cover replacement costs as distinguished from retirement cost? A. You mean as distinguished from original cost?

Q. Yes. A. Because the retirement cost is the replacement cost.

Q. Where the retirement cost is the original cost. A. I would say it was a matter of discussion in every investigation that I have made and every time the question of allowance for depreciation comes up.

Q. Is a matter that's being discussed? A. Well, it has been.

Q. Mr. Zimmerman took that position as indicated in 1919 rate case here, did he not? A. Apparently did, yes.

Q. You were with Day & Zimmerman at that time, weren't you? A. May 1, 1919, is when I came with them.

Q. Aren't there some experts or authorities on this subject today contending that the depreciation allowance should cover the replacement cost? A. Sure. I think anybody that is looking at it soundly would have to conclude that that's the thing to do.

Q. Now, Mr. Downs, if that were true, assuming a company like this, that hasn't increased its track mileage for a long while, they could or it could maintain and replace its system indefinitely from the depreciation allowance?

(Mr. Markell) Why shouldn't it? That's what it's for.

(The Witness) Yes, sir. It couldn't maintain it. The maintenance is taken care of through the operation.

Q. I understand that. So that the need for outside capital would be very little if any? A. Yes, the need for outside capital would then practically be confined to refunding purposes and also to extensions of the property.

Q. Yes, but I am assuming a company such as ours where we don't have extensions worth speaking of. A.

And also to the improvements that were put on to the property over and above what was being replaced in a like kind and at the amount that is included in the valuation for it.

Q. But if they got a sufficient depreciation allowance to enable them to make all those improvements out of depreciation, then it wouldn't be necessary for them to make their improvements or betterments or capital extensions out of new money, would it? A. It might be. It might cost them a lot more when they came to make them than what these units are in the valuation today.

Q. If you take this particular company that has been allowed on an average for the past eight years $817,000 for depreciation, if they were to get an allowance for that same item of $2,200,000, and their capital requirements each year are only around $700,000, they could take care of all capital requirements out of the increased depreciation allowance, couldn't they? A. They could do it. They could use that money for that purpose in any one year if they wanted to, but the reserve for depreciation would still show the two million two.

Q. That would be tantamount to credits to capital account of the rate, wouldn't it? A. Out of the rate?

Q. The depreciation comes out of the rate. A. That's right.

Q. And if additions and betterments could be taken out of the depreciation reserve that would be out of the rate, wouldn't it? A. Yes, they can invest that money in the depreciation reserve for improvements if they want to, temporarily.

Q. Now if the difference between the retirement figure, we will say original cost here, and the replacement figure is a credit to capital, then that credit would be built up largely out of depreciation or out of the rate, wouldn't it?

(Mr. Markell) What does that mean?

(The Witness) I don't understand your question, but the way this Company does, as I understand it, and a good many companies have handled their retirements, is to take them out at the original cost as the amount which

they expended over and above the original cost for the particular retirement, which we will say is twice as much, they have issued new securities against.

Q. A credit to capital? A. Now here we are with a valuation of the Commission determined for its various units of property. A continuation of that policy is simply a dissipation of the stockholders equity in the property established by this Commission, whatever it is. I don't know that there is any. It simply means a dissipation of that, because the particular property retired is no different in kind than it was before, so when you come along and value it again, if you follow the policy that this Company has been following, you have the same value. That assumes of course a continuation of present prices. You have the same value, don't you, and you have been issuing obligations of the Company for this excess cost above the original cost, and you are absolutely wiping out whatever equity the stockholders have been giving them in this valuation above the original cost, can't you see that, and the stockholders won't have a penny.

Q. Then what would happen, to carry that out to its logical conclusion? What would happen to the equity? A. Disappear.

(Mr. Markell) It's being consumed in operation.

(The Chairman) What would happen, Mr. Downs—you have predicated your statement on the theory that prices would be maintained—but what would happen if there should be a slump in prices in the next ten years, a very material slump in prices and we had a new valuation, and we find that the property wasn't worth as much?

(The Witness) Well if you did that—that's a hypothetical question?

(The Chairman) Yes.

(The Witness) You might come down to the point where the present appropriation for depreciation would meet all the retirements in proper form.

(Mr. Tingley) Or be in excess of that.

(The Witness) Sure.

(Mr. Markell) If the base goes down, then the rate of the annual allowance should go down accordingly.

(Mr. Tingley) There is a good deal of a gamble in it then, isn't there?

(The Witness) A good deal of gamble in what?

(Mr. Tingley) In the valuation method of estimating depreciation?

(Mr. Markell) No more than there is in the valuation of property.

(The Witness) It's all a gamble in what the prices are going to be for the cost of retirements. That's the whole point. It's not a gamble in the method. It's a gamble as to what you are going to have to spend, and that's fairly certain, and the only way you can look at that is to look at that as it is.

(Mr. Clark) I don't want to argue with you any further. I think the record contains all I want on that line. Thank you.

CROSS-EXAMINATION (Continued).

By Mr. Sobeloff:

Q. Mr. Downs, would you care to express an opinion as to whether in the immediate future the cost of retiring a given piece of track or some other facility of the Company is likely to increase or decrease? The cost of retiring and replacing something similar? A. Well it's been fairly constant for four or five years, these costs, as far as they affect public utilities.

Q. It's not easy to answer a question of that sort? A. No, it isn't.

Q. But I thought maybe you were studying the tendencies of— A. They have been above and below, but the average is still pretty high and I don't see that they are going to come down very much. They might. You never know. They might go up.

Q. I was very much interested in your comment that the effect of requiring a Company to supplement with its own capital any difference between the allowance made

by the Commission out of the retirement fund and the actual cost of reproducing retired property would result in gradually dissipating the equity of the stockholders or the benefit that the stockholders got from a re-valuation? A. That's right.

Q. Now is that in your judgment really an injustice or a hardship to the stockholder in view of the fact that a great deal of this valuation occurred in just that way? A change in commodity prices? In other words, isn't the valuation considerably higher than the original cost to the stockholder? A. I don't know what the original cost to the stockholder was. But the Commission has found the value.

Q. The prices as of December 31st, 1923, are concededly much greater than the prices when they were purchased and installed? A. As far as prices go, yes.

Q. So that the stockholder got the advantage of this unearned increase in value? A. Well I don't know that he ever got the advantage of the unearned increase.

Q. Didn't he get that in the valuation? A. Not unless he earns on it. If he is not permitted to earn on it he hasn't got anything.

(Mr. Tingley) It is an equity, isn't it?

(The Witness) It's an equity, but it's unrealizable without being able to collect on it.

(Mr. Tingley) And it was created as a result of the valuation?

Q. The same economic forces which you say would result in dissipating this fund originally created it. It did not come from his pocket? A. They might have and they might have not. But what you say is true, it was created by the Commission to the extent that it was created.

Q. I thought that might have some bearing on the question of the justice or injustice of the rule that the Commission is following. A. Oh, no, I don't think so.

Q. I think it does.

(Commissioner Harper) How many electric railways did you say your Company manages?

(The Witness) We have ten. We manage York, Pennsylvania, Scranton, Altoona, Zanesville, Ohio, Lima, Ohio—

(Commissioner Harper) What did you say was the rate of return they earned?

(Mr. Tingley) The highest was 3%.

(The Witness) Scranton is just about breaking even on its operating expenses and taxes and maintenance of about 16 or 17% of the gross cost and we are able to set up very much for depreciation because we haven't got the earnings. Lima, Ohio, is making about 3%, I would say.

(Commissioner Harper) How does the rate of return on electric railway utilities compare with the other utilities?

(The Witness) About one-third. We are making eight or nine and in some cases 10% on light and power in certain places. I would say an average return of 8% where values have been found.

CROSS-EXAMINATION (Continued).

By Mr. Toole:

Q. I would like to ask Mr. Downs what are the fares of these companies? A. I think these are about right. We have a 7c fare in York, four tickets for a quarter. In Scranton there is an 8c fare, four tickets for 30c. Oil City there is a 7½c fare, I think. I am not positive about that one. Zanesville, Ohio, is 10c, four tickets for 25c. Lima, Ohio, 7c and four for a quarter, and Altoona is a straight 7c fare, and then these interurban properties it's figured on a different basis, 3c a mile, 3.6c.

Q. You are saying about the substitution of buses for electric cars. Has that happened on any of these seven or eight lines you mentioned? A. Not a substitution. There has been an augumentation.

Q. In the cities? A. Some of them. Not in Lima.

Q. Do you know of any lines that have superseded buses for electric cars? A. Completely.

Q. Yes, or nearly so. The majority? A. I just can't

recall, but I think there is one in the Northwest somewhere.

Q. Have you heard of Hagerstown, Md? A. Oh, yes. Have they substituted?

Q. They have substituted except the interurban cars. They have buses entirely. You didn't know that? A. No.

Q. And they have a 7½c fare on the buses all over the town.

Now one other question if you can tell me, hypothetical. Could you tell me in any appreciable way what would be the general depreciation of a plant worth $70,000,000, railway plant, excluding replacements and so on, the general depreciation over a period of five years? A. That would all depend on how well it was maintained.

Q. I know it would, but there is a certain average of maintenance, is there not, that ordinary companies ordinarily use? A. Well it might be nothing in a particular five-year period, and it might be pretty big in another five-year period. According to how the Company let maintenance slip.

Q. Suppose it was a company that wasn't very careful of its upkeep of its stock and so on? A. It might be pretty large. It might go down pretty rapidly.

Q. It would then tend to decrease its valuation? A. Well not necessarily. If you took that from it it might.

Q. Yes, if you would take it, for instance, if you would take an automobile and run it all around the country, even if it didn't break anything it wouldn't be worth the same as it was before, would it? A. No, that's right.

Q. Well, if you take a lot of rolling stock and run it around, even though nothing breaks or is replaced, would not the track over which that runs and this rolling stock be worth less in five years than it was before? A. If you didn't maintain it?

Q. If nothing broke, just the same as you run your automobile from here to New York, nothing would be broke on it, but wouldn't there be a certain depreciation in it

even though nothing broke or was replaced? A. Yes, surely.

Q. And that automobile wouldn't be worth as much as it was before, would it? A. No.

Q. And if you run it to California and back it would be still worse? A. That's right.

Q. Now if you apply that rule to electric cars, could you not apply that same rule to electric cars? You run them all over the city thousands of miles? A. Yes.

Q. Without breaking anything. Wouldn't their value be reduced? We are just assuming now, nothing broken or replaced, wouldn't there be just the same as an automobile a general depreciation? A. Not just the same, because they are an entirely different unit.

Q. I don't mean the depreciation to the same extent, but there would be a depreciation? A. Sure.

Q. And if that were carried on for a matter of five years it would be considerable, would it not? A. It might be or it might not be.

Q. But it would be enough to affect the valuation of the plant? A. It might be, yes.

EXAMINATION CONCLUDED.

NOTE: At 2.20 o'clock P. M. the Commission then adjourned until Friday, November 4th, 1927, at 10 o'clock A. M.

TENTH DAY.

(The Chairman) Mr. Howard, you were to let the Commission know whether you had any additional witnesses this morning.

(Mr. Howard) Yes, Mr. Chairman, it had been our intention or at least we were contemplating putting on one or possibly two witnesses about the rate of return, but in going over the testimony that was taken in the valuation case, where that was gone into very fully, and considering the fact that we had one of those witnesses repeat in general form the testimony at the same rate at the emergency hearing we concluded that there was enough in the record on that subject and there was no occasion for taking the time of the Commission in doing that, so all we wish to do this morning, Mr. Hill has looked up the matters that he was requested to investigate by Mr. Tingley and Mr. Sobeloff at the last session and is ready to give that information.

Thereupon—

BANCROFT HILL,

a witness of lawful age, produced on behalf of the applicant, having heretofore been duly sworn according to law, resumed the stand, was examined and testified as follows:

DIRECT EXAMINATION.

By Mr. Howard:

Q. Mr. Hill, I believe you were asked at the last session to answer one or two questions that required that some further investigation on your part.

(Mr. Sobeloff) Mr. Chairman, I think it's only fair to state, I asked the question and indicated that possibly there was a substantial salvage on that bridge, but I would say that on further inquiry that the probability of the salvage is not going to be a very great item, that the whole thing is problematical, and probably it ought not to be considered. I told Mr. Hill that this morning.

(Mr. Howard) That is one of the matters I think Mr. Hill is to look up.

(The Chairman) Do I understand, Mr. Sobeloff, that the City is no longer interested in that proposition?

(Mr. Sobeloff) You mean interested in getting the bridge?

Of course the only way in which the question arose at all was this; the suggestion was made that the United was greatly damaged by this thing because part of its plant was wiped out. In one sense that's true. In another sense the United has been benefitted because instead of having a bridge which it must maintain at some expense annually it now is using the City's bridge which it did not contribute to the construction of, and the maintenance on that will not fall on them. They will only be required, I understand, to maintain their track.

(Mr. Howard) Mr. Sobeloff, I understood the question Mr. Hill was to look up and was to answer was that very one you put now; what the relative annual maintenance cost of the two were.

Q. (By Mr. Howard) Now beginning in any order that you choose, will you take up those matters? A. The annual maintenance I understand will be about $400 a year on that bridge.

(Mr. Sobeloff) On the new bridge?

(The Witness) No, the average maintenance was about $400 a year.

(Mr. Sobeloff) On the old Mount Washington Bridge.

(The Witness) Now it is my understanding that the Company will take over and be responsible for the graded park tax on that bridge as they were not on the old one, and I don't know just what that amounts to in money, Mr. Sobeloff, or whoever it is wants to know it.

(The Chairman) I think that's immaterial.

(The Witness) And they will be responsible for paving repairs on the bridge in the track area I understand.

(Mr. Sobeloff) Just as they are on any street?

(The Witness) That's right. I think that disposes of the Mt. Washington Bridge.

Q. Do you mean that those annual costs are at least equal to the others that you mentioned?

(Mr. Tingley) If you know.

(The Witness) No I don't know. I don't want to give an opinion on it. It's pretty hard to say.

Q. Whatever they are it would be an offset? A. It would be an offset.

(Mr. Sobeloff) When that bridge is removed the approaches will be made available for general real estate uses, won't they? There is a substantial piece of land there that you would have?

(The Witness) I think so. I think in the valuation, Mr. Sobeloff, that land was referred to in one place, I am quoting from memory because I haven't looked this up, the valuation was three or four years ago, was not available for other purposes, and not a very high rate was put on it, and I can give you that if you want.

(Mr. Sobeloff) You will get some utility from that that wasn't available while the bridge was in use?

(The Witness) The Chief Engineer tells me that there will be the cost of taking off the buttons and that sort of thing which will amount to something. I don't think any of that will be very much one way or the other. If you want any information on that I will be glad to get it for you.

(Mr. Sobeloff) I don't think it is material.

Q. And of course the land to the approaches that you refer to, the value of that was not included in the write off of the bridge that you mentioned? A. No. Now the next question was the deduction to easements for track retirements.

Q. Diminution in the total valuation of the easements due to track retirements, is that it? A. Yes.

(Mr. Tingley) Does that include track abandoned through re-routing?

(The Witness) That includes, Mr. Tingley, I think everything. That is, we tried to make it include everything.

(Mr. Tingley) Not only track abandoned but track abandoned through re-routing and is still there?

(The Witness) If the track is abandoned and it is never to be used again, yes.

(Mr. Tingley) And does that include all the track that has been abandoned through re-routing?

(The Witness) It does. At least it does as far as I can find out.

(Mr. Markell) It's all included in your exhibit.

(The Witness) It's what we show in here to be taken out.

(Mr. Tingley) Whether the track's been taken up or not?

(The Witness) Yes. If the track is considered not to be further useful or to be used again.

(Mr. Tingley) What's the test as to that?

(The Witness) The test as to that was the opinion of the Operating Department as to what the chance was of using it again.

(The Chairman) As a matter of fact, the track was abandoned as the result of an order of this Commission in the re-routing case, and in order to again use that track they would have to have an order from the Commission I should say.

(Mr. Tingley) It isn't now used and useful.

(The Witness) I didn't understand that to be the case, Mr. Chairman. I mean I didn't know.

(The Chairman) The Commission authorized, in approving the re-routing of a certain group of cars on a certain group of lines, it authorized the abandonment of the tracks, of the routes and the removal of the track, and I should assume before they would be able to use those tracks again they would have to get permission from

the Commission to put in the curves or to take the thing up again. Perhaps that's a legal question that I am not qualified to pass upon. At any rate I should think the United Railways would have to come to the Commission for permission to resume service on the lines abandoned by order of the Commission.

(The Witness) What I have done is this. I have taken the track which we show here as being either abandoned or taken up or reconstructed, of course reconstructed don't affect you, and I have found the easements under the various values for that, and then if there is any track that should have been taken out of here and wasn't why then the same thing applies to price as it does to the other, but I don't believe there is, Mr. Tingley.

(Mr. Tingley) I think there are several miles of it.

(The Witness) That's subject to check by the engineers of the Commission and if that's the case we will take that out.

Q. And if there is more track than you have found to be included under that item it would increase your experience of track retirements in your other tables, wouldn't it? A. By that much.

(Mr. Tingley) And it would also reduce the valuation?

(The Witness) By that much. The base on the exhibit which we have given you, and on the figures used in the Commission's opinion on the valuation of the $7,000,000, there is a reduction in easements of slightly less than $13,000 or about one-sixth of one per cent. of the $7,000,000 valuation for easements?

(The Witness) Yes sir.

(Mr. Tingley) And the only track out is that which has actually been taken up is it?

(The Witness) Yes.

Q. It that true? That the only track which you have considered as taken out is what was actually taken up? That was Mr. Tingley's question? A. Yes, that's true.

(Commissioner Harper) What value did you use in making that reduction?

(The Witness) Used $25,000 in the city and $17,692 in the old Annex and $12,500 in the new Annex.

(Mr. Tingley) You used the tax basis which the Court of Appeals could be used?

(The Witness) I used the basis used by the Commission in the opinion, Mr. Tingley.

(Mr. Tingley) That's right.

(Mr. Sobeloff) Can you tell me how many miles of track are subject to the 9% park tax in the old city?

(The Witness) No, I couldn't, Mr. Sobeloff. I couldn't even give you a guess on that now. I can find that out for you if you want and let you know.

(Mr. Sobeloff) I don't want to prolong your case for that purpose, but I would like to have it.

(The Witness) Now there was a question whether or not we had any rail salvage. I don't know whether you intended that to come up or not.

Q. That was a question whether any rail you treated as being retired is being used elsewhere? A. Yes. If there is any such rail there is not much. It is taken care of in reducing our maintenance, because I understand that anything that is good enough to use anywhere else there is no charge for it.

(Mr. Tingley) As a matter of fact, isn't it put in your maintenance at the salvage value?

(The Witness) I didn't think it was. Mr. Emmons says it is credited to the job as a credit to depreciation for whatever it may amount to and is charged for whatever it may amount to and is charged against maintenance. I was incorrect on that.

Now I had asked the Engineering Department for a figure as to what they considered that salvage might be in any case, and they gave me about 30c a foot, and I have used in the depreciation charge 50c, or about 40% more, and although that will not apply to retirements, the retirements are only about 15% of the whole, and I believe that that will cover any charge of that kind.

You also asked about the 105 cars and the 110 cars. The 105 cars are gone, not in existence. The frames on the 110 are being rebuilt, but only the frames, and that's only a very small part.

Now I want to make one more statement about Mr. Toole's $5.00. That is a typographical error I am sorry to say. It's only what we show there. The addition is correct.

Q. In other words, the total at the foot of your exhibit was correct, and that was a typewriting error in the middle of the text? A. That's right.

(Mr. Tingley) Another case of the books being in er ror?

(The Witness) Another case of the books being in error and confirms me of what I think of the books.

(Mr. Toole) Don't you think you have been in error in any other way?

(The Witness) I couldn't believe it, Mr. Toole.

(Mr. Toole) Impossible?

(The Witness) Yes.

Q. Mr. Toole thinks that $5.00 must be graft.

A. But it's our $5.00. I don't want to lose it.

There is one error, if I may correct it, here in the mimeographing, and I only do it because I would like to have things as correct as possible. In the amount of cars written off you will find right about the middle of page 23, 88 double truck closed cars. The car number is only 8, and you will find that the additions are correct. It's just a typographical error.

Q. Any thing you have to say, Mr. Hill? A. No.

(Mr. Tingley) The information about the re-routing track wasn't what we wanted, but we have it.

(The Witness) Mr. Tingley, I will get that for you.

(Mr. Tingley) No, we have it.

(The Witness) I gave you what I thought you wanted from the valuations of the Record Department and I gave you what I thought was correct.

(The Chairman) Any further questions, gentlemen?

NOTE: No response.

NOTE: At 10.30 o'clock, A. M., the Commission then adjourned until Tuesday, November 15th, 1927, at 10.00 o'clock, A. M.

ELEVENTH DAY.

(Mr. Tingley) If the Commission please, at the outset of our case I would like to read in evidence an extract from Mr. Hoyt's testimony on the rate of return to be allowed the United Railways, from Case No. 1915.

(The Chairman) What is the date of that case?

(Mr. Tingley) That's the Gas Company case in 1926, page No. 2633:

(Reading) "Q. I am not trying to spar with you or heckle you, but do you think then that the same rate of return should be fixed for the Consolidated Company, for the United Railways & Electric Company, and the Chesapeake & Potomac Telephone Company? A. You are asking me another thing. The same rate of return; you mean to say that a Commission in fixing rates of fare or what not should be guided—they must take into consideration what the traffic will bear, etc.

Q. Of course. A. But I would still say that you couldn't enlist the capital necessary to create the railways here, if there were no railways here, with an expectation of under 8%, and I would say the same thing about this company." (Meaning the Gas Company).

Thereupon—

H. CARL WOLF,

a witness of lawful age, produced on behalf of the Public Service Commission of Maryland, having heretofore been duly sworn according to law, and whose examination was suspended for the purpose of hearing other witnesses; resumed the stand, was examined and testified as follows:

DIRECT EXAMINATION.

By Mr. Tingley:

Q. Mr. Wolf, have you made a study of the property and affairs of the United Railways and Electric Company in connection with its application for a 10c rate of fare? A. I have.

Q. Will you state to the Commission the results of that study and investigation? A. The study that we have made involves a review of the Company's testimony and claims, together with a study in order to arrive at what we think is a fair rate of fare to be charged. The first thing to be studied was the question of the value of the service which it seemed to me enters into the proper fare to be allowed by the Commission. In attacking the problem of the value of the service we first attempted to find out what rate of fare would become a burden on the fare riders, passengers of the United. For this purpose we made a review of the American Electric Railway Association Bulletin No. 116 which showed the effect of the variation of fare on revenue passengers of ten street railway companies in the country, and this has been gotten out in the form of an exhibit.

(Mr. Clark) What's the date of that bulletin?

(The Witness) September, 1926.

Q. Let me ask you one question before you introduce that in evidence. In speaking of rates that are burdensome do you intend to draw any distinction between rates that are burdensome and rates that equal the value of the service? A. Yes. It seems to me there is a difference. A rate may become burdensome before it equals the value of the service for which it's paid. Burdensomeness may be indicated by the point at which riding decreases with increases in fare in spite of the fact that an increase in revenues may result. An increase in revenues with an increase in fare would only tend to indicate that the economic limit had not been reached. In other words, the distinction that I draw is that a rate first becomes burdensome, then it comes to a point where the value of service has been reached, the value of service to the rate payer, to the passenger, and after that it reaches the economic limit. Now the first point that I make on this question of burdensomeness is that if an increased fare causes passengers to decrease it shows that to those passengers using the service the fare has become a burden. The economic limit may be higher than the value of the service and certainly higher than the point of burdensomeness.

Q. Mr. Wolf, have you prepared an exhibit entitled "Effect of Variation of Fare on Revenue Passengers of Street Railway Companies?" A. I have.

(Mr. Tingley) I ask that be introduced in evidence and marked People's Counsel Exhibit No. 19.

NOTE: Statement above referred to is here filed in evidence and marked, "People's Counsel Exhibit No. 19."

Q. Will you explain that exhibit to the Commission, Mr. Wolf? A. This exhibit indicates that with four exceptions every increase in fare resulted in a decrease in revenue passengers, and every decrease in fare resulted in an increase in revenue passengers. Local factors of course play an important part, but it is quite striking that the changes in riding follow so closely in an inverse ratio change in fare.

Q. From what source was this data taken, Mr. Wolf? A. American Electric Railway Association Bulletin No. 116 which was published I think as of September, 1926.

Q. Are there any items specifically that you want to direct the Commission's attention to in connection with that exhibit? A. It might be of interest to follow down the results on some of these systems. The Cleveland Railway Company, the first one outlined, during the course of this review went from a 4c fare to a 6c fare with 9 tokens for 50c. When it made its first increase in April, 1918, from a 4c fare with 3 tokens for 10c to a 4c fare with 7 tokens for 25c the revenue passengers fell off 1.6%.

Q. That was an increase in fare? A. That was an increase in fare. The next was also a slight increase with a slight increase in the number of passengers, being one of the four exceptions to the rule to which I referred a minute ago.

The next was a decrease in fare from a straight 5c fare to 11 tickets for 50c, and there resulted an increase of 16.7% in revenue passengers.

For the next two changes there were no comparable

months, because we tried to compare the months comparable under the new fare and under the old fare so as to eliminate as far as possible trends over a period of years.

(Mr. Howard) Would you mind stating, Mr. Wolf, what you mean by a comparable month and how you selected it?

(The Witness) In April, 1918, the fare changed from 4c, 3 tokens for 10c, to 4c, 7 tokens for 25c, and this latter fare held until August, 1918. For the purpose of arriving at the 1.6 shown in the right hand column we compared the months, April to July, 1918, with April to July, 1917.

(Mr. Howard) You took as many calendar months as were in common with the two and then averaged them?

(The Witness) That's right, on either side of the fare change. At no time did we consider more than one year. Some of these fares held for a period longer than one year, but we took only the one year on either side of the fare change.

(Mr. Howard) That's the method in each case?

(The Witness) Yes. Outside of the 16.7% increase and the 16.1% decrease shown in the right hand column in the Cleveland situation, and the 9.7% decrease, there were no large changes with changing fares.

The Twin City Rapid Transit Company showed that when the fare increased from 5 to 6c in August, 1920, there was a falling off of 3.8% in revenue passengers, and that winter it was again increased, in August, 1925, to 8c, with the token as before, and there was a further decrease of 10½%, and when the fare was again increased in January, 1926, to 8c, 6 tokens for 40c, there was a still further decrease of 7.3%.

The United Railways Company of St. Louis when it went from a 5 to 6c fare experienced a 3.7% falling off in passengers, and when it increased from a 6 to a 7c fare there was an increase of 13.1%, being another of the four exceptions to the rule.

Following on down, when the fare decreased from 8c

with two tokens for 15c to 7c straight fare there was an increase of 7.6% in revenue passengers.

The Oklahoma Railway Company had a somewhat similar experience to the Twin City Rapid Transit Company. When it increased from a 5 to a 7c fare there was a falling off of 9.2% in passengers. When it was further increased to 8c there was a further falling off of 14.4%.

The Androscoggin and Kennebec Railway Company shown on the next page is of interest in showing that when the fare increased from 9c, 6 tokens for 50c, to a 10c straight fare there was a falling off of 19.9% in the revenue passengers.

The Birmingham Railway, Light and Power Company when it increased its fare from 5 to 6c in September, 1919, experienced another of the four exceptions to the rule by having an increase of 13.1% in the revenue passengers. On the increase however from 6 to 7c there was a falling off of 15.1%, and with a further increase to 8c there was a still further falling off of 24.9%, which decrease was practically recouped with a decrease in fare in September, 1923, to 7c.

On the Connecticut Company, the next to the last, it increased its fare from 5 to 6c; the revenue passengers fell off 13.1%. When there was a still further increase to 6c zoned fare there was a further falling off of 3.9%. When the fare was increased from 6 to 10c there was a falling off of 17.3%, and practically the same amount was recouped with a lowering of the fare to 3 tokens for a quarter, and a still further recoupment with a lowering of the fare to 2 tokens for 15c, and a loss of 9.2% as the fare was increased again to 3 tokens for a quarter in February, 1924.

(Mr. Howard) Where was your fourth exception, Mr. Wolf? I didn't catch that.

(The Witness) I didn't point it out.

Q. In the San Antonio Company, isn't it? A. In the Dallas Company at the top of page 2 where there was an increase in fare with an increase of 2½% in revenue passengers.

Q. Mr. Wolf, as I understand it, the purpose of this exhibit is to show not that passenger revenue was not increased as a result of an increase in fares, but to show that an increase in fare to about the present fare of the United Railways and Electric Company results in a decrease in revenue passengers and that that would tend to indicate burdensomeness in rates? A. That's my thought, yes.

(Commissioner Harper) Do any of these exceptions occur where the increase was over 7c?

(The Witness) No, sir.

Q. Mr. Wolf, have you prepared an exhibit entitled "Charles Street Bus Line. Comparison of effect of Fare Changes on Revenue Passengers?" A. I have.

(Mr. Tingley) I ask that be introduced in evidence and marked, People's Counsel Exhibit No. 20.

NOTE: Statement above referred to is here filed in evidence and marked, "People's Counsel Exhibit No. 20."

(The Witness) This is a study of revenue passengers on the Charles Street Bus line by the months preceding and following fare changes made along the same line as the study in People's Counsel Exhibit No. 19.

This shows that when the fare was increased from 5 to 6c there was a 2.7% increase in revenue passengers, and when it was still further increased to 7c, 2 tokens for 13c, there was a decrease of .6%; that when it was still further increased to a straight 7c fare in January, 1920, there was an increase of 10.9%, and when the fare was still further increased to 10c in June, 1922, there was a falling off of 4.6% in the passengers. At the time that the 10.9% was experienced, namely in 1920, the Commission will recall that the street railway was experiencing its largest year so far as revenue passengers are concerned in its existence. Also when the 4.6% decrease was experienced after June, 1922, the rail lines in the city were showing an increased patronage as shown in the two lines at the bottom of this exhibit, where in 1923 for the year following June, 1922, as compared to the

year previous, there was an increase of 2.7% in the revenue passengers of the rail lines with no change in fares and a falling off of 4.6% in the revenue passengers of the Charles Street Bus line with an increase from 7 to 10c in the rate of fare.

Q. Have you any further comment that you want to make on that exhibit, Mr. Wolf? A. I believe not.

Q. Have you prepared an exhibit entitled, "Revenue Passengers Carried During the First Ten Months of 1927, Compared with the corresponding Period of 1926"? A. I have.

(Mr. Tingley) I ask that be introduced in evidence and marked, People's Counsel Exhibit No. 21.

NOTE: Statement above referred to is here filed in evidence and marked "People's Counsel Exhibit No. 21."

Q. Will you explain that exhibit, Mr. Wolf? A. This is a comparison of the revenue passengers carried by the East Fayette Street Bus route of the United Railways Company for the months of January to October, inclusive of 1927 compared with the same months in 1926, and shows that under a 7c fare, as is being charged, there was an increase of 347,620 revenue pasengers, the figure in the lower right hand corner, or 22% increase. This exhibit indicated to my mind that the fare on the Fayette Street Bus lines was not considered by the riders as a burdensome fare and hence an increase in passengers resulted. It also indicated to a slight extent where some of the decreased riders of the rail lines might be going.

Q. What is the fare on the East Fayette Street Bus line, Mr. Wolf? A. 7c straight. The fare was not changed at the time the last increase in rail line fare was given.

Q. Mr. Wolf, have you prepared a chart entitled, "Comparison of Cost of Living with Car Fare in Baltimore"? A. I have.

(Mr. Tingley) I ask that be introduced in evidence and marked, "People's Counsel Exhibit No. 22."

NOTE: Statement above referred to is here filed in

evidence and marked, "People's Counsel Exhibit No. 22."

(The Witness) This chart is very similar to one presented in the emergency case and is a comparison of the United States Bureau of Labor statistics all commodities wholesale index with the index of the average fare received by the United Railways and Electric Company, both curves considering 1913 on a basis of 100.

Before the War the 5c fare was commonly accepted as the value of the service and was the fare that had obtained for a number of years. At that time, 1913, the average fare received by the Company under the 5c fare was 4.867.

The purpose of this exhibit is to attempt to show what the present fare should be from a value of service standpoint as compared to the fare before the War. If a 5c fare was the value of the service before the War, and the value of the service has any relation to the cost of living in general, then the present fare being charged is about what the service is worth today.

Q. Now, Mr. Wolf, that chart indicates a very radical increase in the United States Bureau of Labor all commodities wholesale index costs during the period studied, doesn't it? A. Yes.

Q. It indicates a corresponding but much less pronounced increase in car fares over the same period, doesn't it? A. Yes.

Q. In connection with that increase do or do you not know that the Company was granted every increase in fares which it applied for during that period? A. It was with one possible exception; in 1919 there was a delay of three months in granting the 7c fare, the 6½c fare having been given by the Commission in October, 1919, whereas the Company had asked for a 7½c fare.

Q. So that as I understand it at the present time the all commodities wholesale index line is below the average fare line at the present time? A. That's right.

Q. Now this last line on the exhibit, this last line filled in, what does that indicate, Mr. Wolf? A. The solid line

to the right of 1927 shows the relative position of car fares in Baltimore City if the 10c fare were granted, it being assumed that the average fare received under that condition would be 9.68. That's with the straight 10c fare as asked for by the Company, and it would indicate that the relative position of fares would be very much above the cost of living, and hence place the value of the ride much below what the value of other commodities are.

Q. So that if there is any relationship between the value of a car ride and the value of other commodities this exhibit would indicate that the present fare is equal to the value of the service, would it not? A. That's right.

Q. Have you prepared another exhibit which explains that, Mr. Wolf, entitled "Comparison Between Cost of Living and Fares, 1913 to 1927"? A. Yes.

(Mr. Tingley) I ask that be introduced in evidence and marked, People's Counsel Exhibit No. 23.

NOTE: Statement above referred to is here filed in evidence and marked, "People's Counsel Exhibit No. 23."

(The Witness) That is simply the underlying data for the curve showing the index figures of the United States Bureau of Labor statistics in the second column and the index figures for the passenger fare in the right hand column, showing also in the middle column the dates at which the changes in fares took place.

Q. Have you prepared an exhibit entitled, "Present Fares in Cities having a Population of over 100,000"? A. I have.

(Mr. Tingley) I ask that be introduced in evidence and marked People's Counsel Exhibit No. 24.

NOTE: Statement above referred to is here filed in evidence and marked, "People's Counsel Exhibit No. 24."

(The Witness) This exhibit shows the fares at present being charged in all cities of the United States having a population of over 100,000. A study of that exhibit

shows that 48 out of the 81 cities listed have the same or a lower fare than Baltimore. Only three cities at all comparable to Baltimore in size have a higher fare, and one of these, namely Pittsburgh, the Sunday and weekly pass has been adopted in order to reduce the cost of riding to the public and to help sell the higher fare.

It's also interesting to note that only one city in the United States of over 100,000 population has a straight 10c fare without any reductions of any kind being charged, and this one, Worcester, Massachusetts, is not at all comparable to Baltimore.

Q. Is that the only comment that you want to make on that exhibit at this time, Mr. Wolf? A. I think so, except to point out for the sake of clarity that the second column headed, "Date Effective," is the date when the present fares as they now exist went into effect and not when some basic underlying changes were made. I refer to that on account of Boston, for example, which is listed as having the present fare effective on July 1, 1927, and at that time the only change made was the change in the token rate on certain limited routes. The 10c basic underlying fare has been in effect in Boston for some years.

(Mr. Tingley) If the Commission please, before introducing the next exhibit in evidence, I want to make just one comment which is this by way of explanation.

It is our belief and our contention that the present fare charged by the Company is the maximum limit of the worth of a car ride at the present time. In some of the ensuing exhibits we have introduced comparisons and studies indicating what the effect of certain fares would be on the rate of return earned by the Company; that if the present level of fares is not equal to the value of the service it is our contention and belief that the Company is entitled to a 6% rate of return, that is to say, it is entitled to a 6% rate of return if and only if it can earn it at rates inherently fair to the public. In these ensuing exhibits therefore, they are not to be construed in any sense that the Company is entitled to any increase in fares. The exhibits are introduced merely to indicate what in our belief are the only possible increases in fares which can enter into the consideration of the Commission in connection with the decision of the case.

Q. (By Mr. Tingley) Mr. Wolf, have you prepared an exhibit entitled "Comparison of Results of Street Railway Operation in 1926 in other cities comparable to Baltimore"? A. I have.

(Mr. Tingley) I ask that be introduced in evidence and marked People's Counsel Exhibit No. 25.

NOTE: Statement above referred to is here filed in evidence and marked, "People's Counsel Exhibit No. 25."

Q. Will you explain that exhibit, Mr. Wolf? A. The information upon which this exhibit is based was secured from the files of commissions in the various states in which these cities lie. There are in this table 11 cities considered as somewhat comparable to Baltimore, showing for those 11 cities the operating revenue, the operating expenses, depreciation and taxes, the net income, the rate of return produced by this net income, the base upon which that rate of return is computed and the present existing fare. The operating revenue is correct I believe and opens very little question after the following explanation is made. For Chicago I considered the surface lines only, not the elevated lines. In Los Angeles, the Los Angeles Railway Corporation and the Pacific Electric Railway Company in the City of Los Angeles are put together. In San Francisco we take the Market Street Railway Company. The Washington figures are for both the Capital Traction Company and the Washington Railway and Electric Company.

Operating expenses, depreciation and taxes in the second column are subject to the same comments and are I believe correct.

The third column showing net income is the deduction in each case of the figures in the second column from those in the first column and are not of course corrected for any other figures which might be included and possibly should be included to secure accurately the rate of return, but from my best knowledge and belief in each case, if any correction are to be made in order to arrive at the net income available for a proper rate of return, there would have to be made a deduction which would

still further lower the rates of return shown in the fourth column. Therefore, for the purpose of this exhibit, I believe that I have been more than fair as against the point we are trying to bring out.

(Mr. Howard) What does (b) opposite Cincinnati in that column mean, Mr. Wolf?

(The Witness) You will find that for Cincinnati the third column or net income does not exactly tally with the deduction of the second column from the first. The information we had was not quite clear as to what adjustment had been made as between the two, so we took the higher figure rather than the lower figure which would have resulted in a deduction from the figures in the second column from those of the first. I am not in position to explain the adjustment in any detail.

Q. The figure that you took would cause a higher rate of return than if the other figure had been used? A. That's right.

Q. What does that indicate as to the rate of return being earned by companies in cities comparable to Baltimore? A. According to the fourth column there is only one city in the country at all comparable to Baltimore which is earning over a 6% return and that city, namely Chicago, earned last year 6.27% on a 7c fare with 3 tokens for 20c, being lower than the Baltimore fare at the present time.

There are only five of these twelve cities which earned over 5% on their rate base, one of those five being Baltimore.

The lowest of these is Kansas City, which earned 1.82, and the next Los Angeles, which earned 3.06.

I might say in passing that according to my information there was no application for increased fares in any of these cities which application was denied last year, so that I take that the percentages shown here are the percentages experienced under the companies' conception of the fare which they ought to charge.

Q. This exhibit would indicate that the Baltimore company is earning a higher rate of return than most of the

other comparable cities of the country, wouldn't it? A. That's true.

(Mr. Howard) Would you mind explaining the base column, Mr. Wolf; how you got your figures in that?

(The Witness) Yes. That base column is made up to show the minimum rate base which, according to my information, the commission or commissions would have placed on the property. The $75,000,000 for Baltimore will be explained later as we go along, but is approximately equal to the Commission's valuation of $70,000,000 plus some allowance for easements, the amount of which of course is subject to a difference of opinion.

Boston $159,025,142 is the total investment in physical property only as reported by the trustees of the Boston Elevated Company and includes nothing for working capital, and so far as I can tell nothing for going value, but starts with the basis upon which the fare adjustment in Boston is ordinarily made, namely the face value of outstanding stocks and bonds of slightly less than $100,000,000 and adds thereto the investment of the city and the state in property which is leased to the Boston Elevated.

The Chicago surface lines valuation of $164,600,000 is what the Illinois Commission is now working upon, having been fixed originally in 1919, brought up to date in 1922, and again I believe in 1924 or '5, and contains book additions from that later date to the present.

Cincinnati is the amount of the fixed capital only. The same may be said of Cleveland. It might be mentioned here that both Cincinnati and Cleveland are working on their cost plus plans which insure to the stockholders a fair dividend, which dividend, plus fixed charges, when equated to its fixed capital figures, gives a rate of return of 4.16 for Cincinnati, and 4.35 for Cleveland.

Kansas City is arrived at by dividing by 75%, a figure of $17,500,000, which is the amount of the agreed value of the mortgage, upon which a new 30 year franchise granted by the city was based in order to arrive at the value of the property. I think you will find that $23,300,000 is equal to $17,500,000 divided by 75%.

(Mr. Howard) You mean you assume the mortgage as 75% of the value then?

(The Witness) Yes, sir. And that $23,300,000 is $5,500,000 less than the fixed capital as shown by the Company's books at the end of last year.

The figure for Los Angeles of $54,000 is a mean between the historical and reproduction costs of the two Companies, which mean is somewhat analagous to the practice of the California Commission in the past several cases it has decided.

The figure of $216,000,000 for Philadelphia was based on the minimum valuation of $200,000,000 found by the Commission as of 1920 but plus what additions of $16,000,000 since then, and does not take into account anything over and above the actual minimum, the inference being that the real value is something over and above the $216,000,000 as shown here.

(Mr. Clark) Is there anything in that base above the fixed capital?

(The Witness) The Pennsylvania Commission in 1922 found a minimum valuation of $200,000,000 as of 1920, and said that the fares proposed showed that they did not earn more than a fair return on that minimum valuation of $200,000,000, and hence that it was unnecessary for the Commission to find more closely the fair value.

Q. The Pennsylvania Commission found that both the Philadelphia and Pittsburgh Companies were entitled to earn 10%, did they not, Mr. Wolf? A. That's right.

Q. Has either of them ever earned it under the fares allowed? A. Neither of them has earned it.

Q. Has either of them earned six per cent? A. Not in 1926.

(Mr. Clark) What I meant by my question was whether there was anything above the fixed capital? In other words, any allowance for going value or easements, with respect to Philadelphia?

(The Witness) I know there was no allowance for easements, but as to going value it's impossible to say from

the Commission's opinion. The figure is considerably above the city's claim for the total value of the property, including the going value, and considerably below the Company's claim for that same item.

The Pittsburgh figure of $68,170,000 is arrived at also by adding to the Commission's finding of value as of 1919 or '20, the book additions since then.

The St. Louis figure if the value found by the Commission, and which value is now the subject of attack by I believe both the Company and the City. The Company claims a valuation upwards of $100,000,000. The Commission will recall that in the valuation case the analagy between St. Louis and Baltimore was brought out.

The San Francisco figure of $35,000,000 is arrived at in the same way, as was arrived at the Los Angeles figure of $54,000,000.

That Washington figure of $50,000,000 is arrived at by the process of considering the Washington Railway and Electric Company's property, on the same basis, as was used by the Court in fixing the value of the Capital Traction Company. If that principle were carried out to its final analysis the value would be something higher than $50,000,000, but it's a matter of common knowledge that this is the figure, now being spoken of as the basis for a Consolidation of the rail lines.

Q. Mr. Wolf, Cincinnati and Cleveland are operating under service at cost contracts, are they now? A. That's right.

Q. And what does this exhibit show they are earning on the fair value of their property? A. 4.16% for Cincinnati, and 4.35 for Cleveland.

(Commissioner Harper) Mr. Wolf, do I understand that Cleveland with a higher gross, altho the base is only one-half that of Baltimore, that the return is less? Is that what the exhibits shows?

(The Witness) Yes, sir, the exhibit shows that with a higher gross in Cleveland and a rate base one-half as large as Baltimore, as shown in this statement, the return is 4.35 as against 5.67 for Baltimore.

(Commissioner Harper) What's the mileage of the Cleveland Railways, do you know, approximately?

(The Chairman) It's approximately the same as Baltimore.

(The Witness) I have it.

Q. Suppose you put it into the record? A. Four hundred and eleven miles.

Q. Almost the same as a T.

(The Chairman) Of course if these bases were increased, it would show a smaller rate of return?

(The Witness). Yes, sir. I tried all the way thru here, Mr. Chairman, and if I didn't do it I would like to have it pointed out so that I could do it, to show the maximum rate of return that any of these companies could possibly have earned last year.

Q. Is there any further comment that you have to make on that exhibit, Mr. Wolf? A. The Commission will recall, of course, Mr. Nash's and Mr. Down's testimony as to the rates of return being received by the Stone & Webster properties and the Day and Zimmerman properties over the country and I think that probably bears out very closely the results shown in this exhibit, namely, that the rates of return earned by street railway companies in the country, today are considerably less than 6%.

Q. Before leaving these exhibits I want to ask you one further question. In view of these exhibits and the data contained in them have you any comment to make as to the fair value of a car ride in Baltimore at the present time? A. I think that in view of the exhibits presented, in view of the service that is being presented today in Baltimore, in view of the cost of the car ride before the war, that the present service is worth just about what is being received for it.

Q. Now that chart study assumes that the same standard of service is being rendered at the present time that was rendered in 1913, doesn't it? A. That's right.

Q. Have you any comment to make as to the disparity

in the service being rendered now as compared with that rendered in 1913? A. I think probably the factors that were referred to in opening statements here as to the slowing down of street car service today, which slowing down was used as an example of what the Company is up against, in themselves tend to show that the worth of the service to the car-rider is decreasing. While it may be said that the Company cannot help traffic delays, cannot help over-loading as is being experienced, cannot help erratic headways that are being experienced, it might also be said that those very things tend to make the service worthless to the car-rider. He has to wait varying times for cars. He has to get in overloaded cars, and he has to take longer to get between any two points, and those things it seems to me make the service worth relatively less to him.

Q. Are those factors borne out by the reports filed by the Company as to its compliance to the Commission's standards? A. I think they are very closely borne out. All of our checks and all of our reports.

Q. So that in the chart which you filed you assume a similar or comparable standard of service today compared with that of 1913? A. That's right.

Q. But the actual indications are that the service is not comparable to it but is inferior to it? A. That would be my deduction.

Q. Mr. Wolf, have you prepared an exhibit entitled "Probable Trend of Business in 1928 as Affecting Revenue of The United Railways and Electric Company of Baltimore"? A. I have.

(Mr. Tingley) I ask that be introduced in evidence and marked People's Counsel Exhibit No. 26.

NOTE: Paper above referred to is here filed in evidence and marked People's Counsel Exhibit No. 26.

(The Witness) This is simply a comment for which I must assume entire responsibility as an attempt to picture what will be the probable trend of business in 1928 affecting the revenues of The United Railways and Electric Company of Baltimore, and if you will permit I might read it:

"(Reading) In order to fix a proper rate of fare it is necessary to consider carefully the probable business of the company for next year. Various factors are at work, some tending toward improved conditions and other toward poor conditions. During the present year the revenues of the company have fallen off, largely on account of three factors; first, unemployment; second, weather conditions (particularly in the summer months), and third, automobile competition. General business conditions ought to determine the effect of the first of these factors on next year's business; the law of averages would militate in favor of increased riding next year so far as the weather has any effect; and a study of the automobile industry would throw some light on the probable effect of this competition.

It is interesting first to see what some authorities think of the outlook for business next year. President Coolidge's statement issued on October 17th last would indicate that the Federal governmental authorities look forward with no misgivings to the future. Prophecies of outstanding business organizations as disclosed in recent issues of their bulletins may be summarized as follows:

Harvard Economic Service—Outlook for business now generally favorable. Apparently little more than expected seasonal decline in activity has taken place this summer, and this let down in industry and trade will be followed by autumn expansion.

Moody's Investors' Service—Boom in business is likely to come before another depression.

Babson Statistical Organization—Business men and investors should take a conservative position, but immediate outlook for business is moderately good.

National City Bank—The absence of any fundamentally unfavorable factors affords ground for confidence.

Guaranty Trust Company of N. Y.—Ample support for belief that brisk revival is on way.

National Bank of Commerce in N. Y.—Confidence in upturn of business has become fairly general.

The National Association of Manufacturers has given out a fairly optimistic picture of the future, as disclosed by the result of its annual survey of conditions in 22 lines of industry. Local contractors, who are wont to look to the amount of work coming out of architects' offices and projects upon which bids are asked, point to next year as having all the earmarks of the possibilities of increased activity in the building trades over this year. New industries are being brought to Baltimore at about the same rate as in the past, and existing industries are showing little tendency to retrenchment. The industrial electric power business has shown a healthy increase, as have telephone toll calls. Post office receipts, after a summer slump, are headed for last year's high points. The view is held in many quarters that the Mississippi flood of the past summer had a greater effect on Baltimore business than might be supposed. Whatever adverse effect it would have will be more than offset by improved conditions next year which will come with the recuperated purchasing power of the flood victims.

Automobile production has dropped off considerably during the present year, the probable output for 1927 being lower than for the past three years. If the new Ford car comes onto the market this year, production in 1928 will doubtless jump. There is some leg, however, between production and use, and hence the fewer machines manufactured this year would indicate less serious competition on the part of automobiles with street cars next year. The registration of automobiles in Maryland during the past two years would indicate that the peak of this automobile competition may be in sight. Lessened production this year would indicate that the peak of competition has been reached. Upon this basis, therefore, street car riding in 1928 should show a healthy increase over 1927.

From a review of all of these factors, and considering also the fact that 1928 will be a presidential year (although the effect of this on business is pretty generally discounted), I am of the opinion that 1928 will show an increase in revenue passengers unless an increased fare is granted which will offset all of the factors tending to improvement."

In other words I have stated and I have used in these exhibits a little more pessimistic point of view than I really felt. From an analysis of the situation it looks to me like 1928 is going to be a considerably improved year over 1927. After all of course that's anybody's guess.

Q. Mr. Wolf, have you an exhibit entitled "Still Up and Going Strong"? A. Yes.

(Mr. Tingley) I ask that be introduced in evidence and marked People's Counsel Exhibit No. 27.

NOTE: Cartoon above referred to is here filed in evidence and marked People's Counsel Exhibit No. 27.

(Mr. Howard) Do you think that proves anything, Mr. Tingley?

(Mr. Tingley) I am sure of it, Mr. Howard. Maybe it will be the only way of proving the 8% rate of return.

(The Witness) As the Commission will see that's simply a copy of a cartoon drawn originally for the Philadelphia Public Ledger and gives Mr. Chapin's idea of what a fine outlook is ahead of business.

Q. I think it speaks for itself, Mr. Wolf. A. Yes.

Q. Have you an exhibit giving the outline of a statement by President Coolidge as to business conditions in 1928? A. I have.

(Mr. Tingley) I ask that be introduced in evidence and marked People's Counsel Exhibit No. 28.

NOTE: Paper above referred to is here filed in evidence and marked People's Counsel Exhibit No. 28.

(The Witness) That's simply a clipping that doubtless everyone has read, being a review by Mr. Effary of the President's remark on the business trend.

Q. Will you summarize that, Mr. Wolf, or do you want to read from it? A. I think perhaps the statement has been pretty well read already, but it is pointed out in here that it is the President's view that the country is industrially and commercially as well if not better off

than it was in October last year; that the immediate situation is improving, and that while the future cannot be foretold the President sees absolutely nothing ahead to discourage any business man. Then he goes on to draw from the reports of the various Governmental departments what he thinks will be shown by the trend of business in the next several months, namely, that American business will improve and it is now fundamentally sound, having all the earmarks of the prospects of prosperity.

Q. Mr. Wolf, have you prepared an exhibit entitled "Estimate of Passenger Revenue for 1928 Assuming 1 Per Cent Increase over 1927 in Full Fare Passengers and Normal Trends in Other Passengers. Allowing for a one cent transfer charge and full fare for employees and concessionaires"? A. I have.

(Mr. Tingley) I ask that be introduced in evidence and marked People's Counsel Exhibit No. 29.

NOTE: Statement above referred to is here filed in evidence and marked People's Counsel Exhibit No. 29.

(The Witness) A study of several combinations of fares was made in order to find the combination that would return to the Company something in excess of a 6% return on the fair value of its property, and also that would meet all the tests hitherto used by the Commission in determining to arrive at the proper amount of net income.

Q. This and the two succeeding exhibits assume that any increase in fare would not be beyond the value of the service? A. That's right. Not necessarily that an increase would not be burdensome, but that it might not be beyond the value of the service.

Q. That's correct. A. In this exhibit we have considered all of the fares as at present being charged with the addition of a one cent charge for transfers and a full charge for employees of the Company and concessionaires who are now riding free.

The first column of this exhibit shows the number of passengers estimated by the Company in its exhibit No. 24 expected for the year 1927, and while there might be

something to be said both ways on those figures, nevertheless I have adopted them on account of the fact that too little of 1927 is left to go very far one way or another.

For 1928 I have estimated a one per cent increase in the number of full fare passengers, making for the full eight cent fare 7,428,057 passengers, and for the token fare passengers 198,356,049, or a total full fare passengers of 205,784,106.

For the commutation riders in the first, second and third county zones, Bethlehem Steel employees and a few miscellaneous riders I have considered what seemed to me normal increases as has been experienced during the last several years, and from that condition I arrive at a total of 2,600,000 for the first county zone, 270,000 for the second county and 45,000 for the third county zone, 1,600,000 Bethlehem Steel employees, and approximately the same which with round numbers has been taken as 8,000 miscellaneous riders, giving a total of 4,523,000 commutation riders in 1928.

(The Chairman) Do I understand, Mr. Wolf, that you have not taken for those first, second and third county zones, Bethlehem Steel and so on the one per cent increase?

(The Witness) No, sir. The Company's exhibits I think will show and certainly a study of the trend of the past few years, that the commutation riders have increased rather consistently as against either an increase or a decrease in the other riders, and hence these riders have been studied separately from the full fare riders. That of course is apparent on the face of it when we see the increased settlements that have taken place around the edge of the City limits. You would expect an increase in the first county zone riders. That is less pronounced further out and still less on the third county zone.

Q. I think Mr. Emmons called attention to the increase in suburban riding. A. He did. For the half fare riders I have assumed practically the same number in 1928 as in 1927. I perhaps might better have increased that by the same amount, namely, one per cent as were the adult

passengers increased, but there has been shown some tendency in the last few years for the half fare to remain about the same.

School tickets have been increased in accordance with the experience of the last three years, giving 3,860,000. Our grand total of number of passengers is 222,247,106. At the present fares these passengers would pay $16,200,200.

The number of transfer passengers has been increasing slightly, so that I estimated that there would be carried in 1928 without a charge 94,000,000 transfer passengers, this being the number of transfers that are lifted. A number of these transfer passengers are of course convenient riders who use the transfer for to ride only a few blocks because they can get it without cost. A number of those would of course be lost if a charge were made, the number lost depending largely upon the amount of the charge. With a one cent charge for transfers I have assumed that there would be a loss of 20 per cent, and I believe that this loss is very close to what would be experienced. This would leave the net number of transfers sold of 75,200,000, which at one cent would return to the Company $752,000.

In the Emergency Fare Case Mr. Nodder made a study of the effect on the Company's revenues if a charge were made for its employees and concessionaires. After the emergency hearing some adjustments were made in those figures, so that he now arrives at a figure which he will substantiate in his testimony of $171,883.

Q. Those adjustments were made in the light of some suggestions made in the Company's cross-examination, weren't they? A. That's right. The total of these three items, namely the present charges for the present class of fares of $16,200,200, $752,000 for a transfer charge, and $171,883 for the full fares for employees and concessionaires, gives a total of $17,124,083 as the gross revenues which would be experienced by the Company under this combination of fares, and that amount I believe to be a very fair estimate for 1928.

Q. Mr. Wolf, have you prepared an exhibit entitled

"Average Loading and Transfer Passengers on Harford Road Cars 6:00 to 9:00 A. M. and 4:00 to 7:00 P. M. on Typical Week Day"? A. I have.

(Mr. Tingley) I ask that be introduced in evidence and marked People's Counsel Exhibit No. 30.

NOTE: Statement above referred to is here filed in evidence and marked People's Counsel Exhibit No. 30.

Q. Will you explain the purpose of that exhibit? A. When we got into this question of transfers we wanted to find out on whom the burden of paying the increased charge would fall.

Q. Transfer charge? A. Transfer charge would fall. Accordingly we selected one line leading from the suburbs into the City which seemed to us typical for this purpose and made a three day study in order to arrive at the number of long haul and short haul passengers using transfers.

On the left side of this exhibit are shown the average results for three days on the inbound traffic in the morning and on the right hand side are shown the average results outbound in the evening. I make no pretense about the results of this check being complete. It's simply an attempt to get at a picture, and another check may show slightly different results, but I believe that it's typical enough to illustrate the point that we have in mind.

For these three days which were typical days, being three normal week days in which there was no bad weather experienced, the average car between 6:00 and 9:00 o'clock in the morning arriving at North Avenue from the north carried 66 passengers. Twelve of those passengers left the car at North Avenue and four others boarded the car at North Avenue, so that 58 were on the car that left going south. Of these 58, five of them got off at Federal Street, none got out, so that there were 53 passengers on the car when it left Federal Street and arrived at Preston Street. At Preston Street three more of them got off, none got on, so that fifty passengers were on the car leaving Preston Street and arriving at Monument Street. At Monument Street five more passengers

boarded the car, so that fifty-five were on the car going south.

There we stopped our check, because we felt that the identity of the long and short haul passengers, so far as it could possibly be placed at the first four checking points, could not be determined at further points south.

A recapitulation of these figures at the bottom shows that there were 75 total passengers boarding the cars. I have considered that the passengers leaving the cars at North Avenue, at Federal Street, at Preston Street and at Monument Street were long haul passengers, namely passengers who had boarded the car before they had reached North Avenue and were hence riding from some distance out.

I have assumed that those passengers boarding the car at North Avenue and points south were short haul passengers because they could not have come from any great distance except the few passengers who might have ridden on checks across North Avenue after having come in from some longer outlying line.

On this basis there were twenty long haul passengers on each car and nine short haul passengers, or slightly more than twice as many long haul as short haul passengers.

The same reasoning and the same recapitulation for the evening traffic shows somewhat similar results except that the number of long haul passengers is slightly more than twice the number of short haul transfer passengers.

All of this shows to my mind that the long haul passenger would be the one on whom the cost of transfers would fall most heavily, and it was the purpose of the exhibit to try to find out where this cost of transfers would fall.

(Mr. Clark) How does this reflect a three day study?

(The Witness) I have taken the total number of cars in those hours for three days and worked it down to the average per car.

Q. Mr. Wolf, have you prepared a study entitled

"Estimated Passenger Revenue for 1928 with 8 Cent Full Fare and Five Cent County Fares"? A. I have.

(Mr. Tingley) I ask that be introduced in evidence and marked People's Counsel Exhibit No. 31.

NOTE: Statement above referred to is here filed in evidence and marked People's Counsel Exhibit No. 31.

(The Witness) This is another combination of fares different from the one just described with the transfer charge. In this combination I have assumed a straight eight cent adult fare, a straight five cent commutation fare for all zones and all purposes with a half fare and school tickets as at present, namely, four cents and five cents respectively.

The number of full fare adult riders is estimated at 204,024,000 based on a 3.17 per cent decrease over 1926, which was the experience of the Company for the first nine months of 1927. It seems to me that this is conservative. We have based it on a slightly smaller number of passengers than are shown under the present fare, believing as I do that an increase in fare would have some tendency to discourage riding.

The total number of commutation fare riders is taken as being 4,523,000, and the same number of half fare and school ticket fares is taken as before.

This combination produces a total passenger revenue of $17,064,270 which is just $60,000 less than would be produced with the one cent transfer charge and full fares for employees and concessionaires. This figure of $17,064,270 is I believe conservative with the assumptions I have made.

(Mr. Clark) That exhibit doesn't contemplate token fares at all, does it? The second line there?

(The Witness) That's a straight eight cent fare. I used that item because in 1927 it is a reduced token fare. In 1928, according to this assumption, the token fare would be the same as the full fare.

(Mr. Clark) No token fares at all in this exhibit are there?

(The Witness) No reduced token fares.

(Mr. Clark) But the present token fares——

(The Witness) A token fare of eight cents.

(Mr. Clark) A flat fare of eight cents.

(The Witness) Yes.

(Mr. Clark) You mean two tokens then for sixteen cents.

(The Witness) That's right.

Q. Mr. Wolf, have you prepared an exhibit entitled "Estimate of Net Income and Rate of Return for 1928 Based on Present Fares with Charges of One Cent for Transfers and Full Fare for Employees and Concessionaires"? A. I have.

(Mr. Tingley) I ask that be introduced in evidence and marked People's Counsel Exhibit No. 32.

NOTE: Statement above referred to is here filed in evidence and marked People's Counsel Exhibit No. 32.

(The Chairman) How does that difffer from No. 29?

(Mr. Tingley) That simply shows the rate of return that will be yielded by the charges.

(Mr. Howard) No. 29 gave the gross.

(Mr. Tingley) That's right.

(The Witness) This exhibit starts with the $17,124,083 of passenger revenue shown by Exhibit No. 29. To this amount is added $235,000 for other revenue which is the same as used by the Company in all of its exhibits, giving a total gross revenue of $17,359,083.

Operating Expenses have been estimated at $10,177,207 as shown as the bottom of the page. The Company estimated $10,264,000 for operating expenses for 1928 which included an allowance of $265,000 increase over 1927 present charged expenses for power and accident reserve. These amounts have been reduced by $100,000, leaving a balance of $10,164,000. My purposes in reducing these amounts are first that an increase of the acci-

dent reserve of $75,000 will be explained by Mr. Nodder. An increase of $90,000 has been allowed for power because of the fact and this fact only that I believe there is some possibility of the Company paying it. I don't believe that the amount should be increased, in fact I still believe, as I testified in the temporary rate case, that the amount should be reduced below what is now being paid on account of the clause in the Company's contract with the Power Company, but in the final analysis the amount that the Company will pay depend very largely on the ability of the Railway Company's representatives to withstand argument in its negotiations with the electric company. There is another factor which enters into it too, and that is the fact that the amount to be paid by the Consolidated Company for hydro-electric energy has not as yet been finally determined, and if that payment is excessive there will result some increased payment by the Railway Company to the Electric Company.

In order to work this statement down to a fair return I have added to operating expenses the figure of $13,207 which was shown by the Company in its exhibit No. 24. Depreciation has been taken on the same basis as is now being charged by the Company, namely five per cent of its revenue. Taxes are taken at $463,214 for property taxes, this being the same amount as was used by us in the temporary case and is $75,000 lower than that used by the Company. The same statements apply here I believe as applied in the emergency case, namely, that there is strong likelihood of the $75,000 increase not being experienced on account of the fact that the State Tax Commission still has to set the valuation on the capital stock of the Company, and if it sets an amount equal to the present assessment there will be no increase at all. Of course the Commission in finally passing upon the fare should know exactly how much increase is given, $75,000 will be the maximum increase; nothing will be the minimum increase. It may be between either. It may be either one of those figures. My own idea is it will be closer to nothing than the $75,000.

Park Tax is taken at 6.7% of passenger revenue although on the Company's experience of the past few years I think we might have been justified in taking a

slightly smaller percentage because of the fact that the increase in riding on the outlying lines is a little faster than the increase in riding on the lines which pay a park tax, but I have taken the same percentage as experienced this year, 6.7%. Income Tax is figured in the usual way, arriving at $145,000.

This gives Total Operating Expenses, Depreciation and Taxes of $12,800,690, leaving an Operating Income of $4,596,393, to which is added $38,000 for Non-Operating Income, this being the amount which, according to the Company's Exhibit No. 24, is to be considered in arriving at the amount available for return. Hence $4,506,393 is the amount available for return, which is 6.13% on a rate base of $75,000,000. If deductions of $3,445,000 are taken there is left a net income of $1,151,393.

Q. Will you explain how you arrive at the rate base of $75,000,000, Mr. Wolf? A. Yes. The Commission set a value on the Company's property as of December 31st, 1923, of $70,000,000 plus $7,000,000 for easements. The $70,000,000 is very close to the Commission's estimated cost of reproduction less depreciation, and hence it is fair to assume it seems to me that the value would fluctuate somewhat with changes in the level of construction costs. Since the date of that valuation construction costs have decreased something over 3%. If this amount were allowed in its entirety the $70,000,000 as it then existed would hence shrink to $67,900,000. Since then of course there have been some increases in Fixed Capital. Those increases, according to the Company's books, have totalled over two and a half million dollars. According to Mr. Hill's corrections, in order to arrive at increases based on the valuation, it amounted to something over a million dollars. Mr. Nodder has made still further corrections which bring the total, with additions to be added to the rate base in the past three years and a half, of only $174,000. $174,000 added to the $67,900,000 would be $68,074,000. If the full allowance of the Commission as previously made for easements of $7,000,000 is shown, that would give a rate base of slightly over $75,000,000. If the allowance only as claimed by the People's Counsel in the easement case were made, the rate would be considerably less than $75,000,000, closer I believe to $72,000,000.

There will doubtless be made some additions to Fixed Capital in 1928, so that from all of these things, with the present status of the easement valuation, I do not believe that a rate base of more than $75,000,000 for 1928 can be assumed, and this is the base which I took and is I believe a fair one.

Q. Mr. Wolf, assuming that the value of the service warranted any increase in fares whatsoever, this exhibit would indicate that either a one cent transfer charge with full charge for employees and concessionaires or a straight eight cent fare with a five cent charge in the counties would yield in excess of a six per cent rate of return, wouldn't it? A. That's right.

Q. And the previous exhibit would indicate that that is more than the companies situated in comparable cities to Baltimore are earning? A. That's right.

Q. Have you any further comment that you want to make on that exhibit, Mr. Wolf? A. I might just add that this 6.13 rate of return which will be experienced according to this estimate with the present fares plus a one cent transfer charge and full fare for employees and concessionaires would be 6.07 under the straight eight cent fare.

(Mr. Clark) Mr. Wolf, that increase in fixed capital for the past three and a half years, that is from December 31st, 1923, $174,000, did I get that figure right?

(The Witness) That's right.

(Mr. Clark) How is that made up?

(The Witness) Mr Nodder will explain that.

(Mr. Toole) Mr. Wolf, did you consider on that basis depreciation since 1923?

(The Witness) No, I deducted nothing in addition for depreciation since that time.

(Mr. Toole) There would be some depreciation since 1923, and if so that would lower that base, wouldn't it?

(The Witness) That property which existed in 1923 has undoubtedly depreciated. Since then there has been

additional new property put in to replace the old property, so that I am not prepared to say there would be any additional deduction.

(Mr. Toole) Didn't you add that into your book additions to capital?

(The Witness) No. Mr. Nodder will explain just how he got his $174,000, but I don't think he considered any depreciation.

Q. Mr. Wolf, have you prepared an exhibit entitled "Comparison of Net Income Estimated for 1928 with Tests Applied by Commission in 1924"? A. I have.

(Mr. Tingley) I ask that be introduced in evidence and marked People's Counsel Exhibit No. 33.

NOTE: Statement above referred to is here filed in evidence and marked People's Counsel Exhibit No. 33.

(The Witness) This is only an effort to bring together some of the figures about which we have been talking as to the Net Income of the Company.

(Mr. Clark) Mr. Wolf, before you go one with that, I intended to ask you a while ago. You treated the income available for fair return as net income. Now here you use a different figure. Here you use the figure in the term the Company uses it.

(Mr. Howard) Are you speaking of No. 33 or No. 32, Mr. Clark?

(Mr. Clark) I forget which one it was. You called it net income and I always figured that figure of four million and something as gross income and the figure after deductions as the net income.

(The Witness) You are right. If I used that term I didn't mean to use it.

(Mr. Clark) It's Exhibit No. 25. You say net income $4,252,000. Now I have always used that figure as Gross Income.

(The Witness) Oh, as I explained then Mr. Clark it was very difficult to arrive at a wording which expressed anything.

(Mr. Clark) If you had carried that through I wouldn't have said anything, but here you are using the $1,293,000 as your Net Income.

(The Witness) Your point is very well taken.

(Mr. Clark) I will refer to this Exhibit No. 25, if I have occasion to refer to it, I will refer to $4,252,000 as Gross Income.

(The Witness) You are perfectly justified in doing that.

(Mr. Toole) Does that apply to Boston, Chicago and all the rest?

(The Witness) Yes, the same nomenclature would apply throughout.

Q. Will you comment on Exhibit No. 33, Mr. Wolf? A. Exhibit No. 32 showed a Net Income of $1,151,393. In arriving at that amount, as I stated, there had been made certain adjustments in order to show the amount available for the return. These adjustments are shown on the Company's Exhibit No. 24. In order to compare with the tests applied by the Commission in 1924 it is necessary to reinstate these adjustments because they are amounts that the Company really experienced in its Net Income in order to arrive at its Net Income, but they are amounts which should be deducted in order to get a fair return.

Reinstating these amounts we arrive at a net income comparable to that used in the Commission test of $1,293,814.

The Commission will recall that in previous cases it said that the minimum net income to be considered would be $1,000,000, and that the Company might be permitted, if it could, to earn a million and a half. It also stated at one time that one and one-third times fixed charges would be a test, which for 1928 would amount to $1,148,333.

In 1924 the Company presented an estimate which was used in the Commission's opinion which showed that the fares then asked for would produce a net income of $1,-

182,142. The Commission at the same time it spoke of one and one-third times fixed charges said that one and a half times fixed charges might be earned if possible.

The net income required to produce six per cent on the present fair value, namely, $75,000,000 as I have used it, is $1,055,000.

This exhibit shows therefore that if my estimates for 1928 are correct as shown on Exhibit No. 32 the Company will experience under either the eight cent fare or the present fares with one cent transfer a net income greater than any of the minimum tests applied by the Commission, namely $1,000,000 one and a third times fixed charges or the test to which Mr. Tingley referred, 6% on the present fair value.

Q. And more than the estimate made by the Commission in 1924 of $1,182,142. A. Correct.

Q. In other words, the net return would satisfy everything but the two maximum requirements set by the Commission in 1924? A. That's right.

(Mr. Clark) And those maximum requirements were to be the result of economy.

Q. Have those requirements ever been satisfied by any fares established by the Commission in the past? A. They have not.

Q. Mr. Wolf, have you prepared an exhibit entitled "Estimate of earnings under fares shown by Company Exhibit No. 24"—"corrected for operating expenses, depreciation and taxes"? A. I have.

(Mr. Tingley) I ask that be introduced in evidence and marked People's Counsel Exhibit No. 34.

NOTE: Statement above referred to is here filed in evidence and marked People's Counsel Exhibit No. 34.

(The Witness) In the left hand column of this exhibit, down to the figure for the rate base are the Company's figures shown in its exhibit No. 24, by which it arrived at an amount of $5,578,079 available for return. This amount equated to a rate base of $75,000 to which refer-

ence was made a few minutes ago would give a rate of return of 7.44% in 1928.

In the right hand column, I have made certain adjustments which seemed to me to be reasonable. The operating expenses are estimated at $10,164,000, which figure includes the amount estimated by the Company with the exception that only $90,000. for power and 75——

Q. Additional you mean? A. Additional for power and $75,000 additional for accident reserve are included as explained a few minutes ago. The increase of $130,056 being the one cent per hour increase in wages is included.

Q. That's the amount which the Company has actually contracted for 1928? A. That's correct. If depreciation is taken on the same basis, as is now being charged, namely 5% of total revenues there would be a deduction for depreciation of $1,020,000. Property taxes are taken at $467,000 being the same as shown on our exhibit No. 22. Park Tax is taken as slightly less than 6.7% of the passenger revenue in this case, namely 6.63 as shown by note (D) at the foot of the page. This would give total deduction of $13,497,000 or a net operating income of $6,894,000. Non-operating income of $171,000 is included, and here let me say that this note to the right of $171,000 should be entitled (e)—instead of (d) giving a gross income of $7,065,000 and after deductions $3,445,000, leaving a net income of $3,620,000. The amount available for return is $6,936,000, being the $7,065,000 shown above less adjustments to get at the amount actually chargeable for returns. On a rate base of $75,000,000 this would give 9.25%

In other words, this exhibit would indicate that the Company might be expected under its proposed fare to earn 9.25%.

(Mr. Howard) Mr. Wolf, would you mind explaining now, note (c) what the item deduct $4,000 for return means?

(The Witness) In the Company's exhibit No. 24 there was a deduction of $3,786 to be made in order to arrive at the amount of the fair return. That, as shown in an

explanatory note, was the tax refund on Sparrow's Point bonds transferred to deductions. I took that figure as $4,000 because as you see I was getting all these figures in the right hand column in even thousands. In other words, that deduction is only what the Company itself said in its exhibit.

Q. Mr. Wolf, have you prepared an exhibit entitled "Estimate of earnings for years 1928, 1929, 1930, based on Company's estimate of future trend. Continuation of Company exhibit No. 24"? A. I have.

(Mr. Tingley) I ask that be introduced in evidence and marked People's Counsel Exhibit No. 35.

NOTE: Statement above referred to is here filed in evidence and marked People's Counsel Exhibit No. 35.

(The Witness) This is a picture as I see it of what is ahead of us if the Company's estimates for the future are correct. The first column shows the figures used by the Company in its exhibits by which it arrived at a net available for return of $5,578,079, which would give a 7.11% return.

Q. On what rate base? A. On a rate base of $78,500,000.

Q. And that was taken from what? A. Exhibit No. 23 of the Company shows a rate base for 1927 of $78,040,000. There is bound to be some increased capital, and I have assumed that for the next three years at $500,000.

Something was said in the Company's testimony as to the prospects of a 3% decrease in revenues for the next several years, after a 5% decrease for next year occasioned partly by the increased fare.

Something was also said, in fact one of the Company's exhibits sets up a decrease of only 1% in operating expenses, hence in 1929 and '30, the second and third columns I have shown passenger revenue arrived at by decreasing the previous year's revenue 3%, using the same amount for other revenue $235,000.

Operating expenses are decreased one per cent from

the preceding years' figures and include a wage increase of one cent for each of those years.

Depreciation is taken at the Company's claim of $2,200,000 for 1928, plus 4% on additions, which 4% I understand to be the Company's claim.

This would give total operating expenses and depreciation for 1929 of $12,653,135; in 1930, $12,698,804, leaving a net operating revenue in 1929 of $7,133,185, and in 1930 of $1,500,966.

Taxes are taken at the Company's claim with an increase of $10,000 per year in 1929 and 1930 on account of the fact that increased capital may result in increased taxes.

Park Taxes taken are as used by the Company, 6.7% of passenger revenue.

Income tax is computed in the ordinary way.

The operating income therefore will be $5,003,925 in 1929 and $4,482,326 in 1930.

If to this amount is added the amount of non-operating income as estimated for next year, there is available for return in 1929, $5,041,925 and in 1930, $4,520,326.

If the Company's rate base continues to increase by an amount of $520,000 per year, these amounts available for returns in 1929 and 1930 would produce 6.38%, and 5.68% respectively.

Something was said, I believe, about the Company being entitled, in the Company's statements, to a minimum return of 7%, hence I assume when 1929's results are shown, the Company would apply for an increase in fare in 1930 in order to bring it above the 7% return. In order to do this, the base fare would have to be increased from 10 cents to 11 cents, which 11 cent fare would produce 7.08%. Of course that might be arrived at by a zone system, by some increase in commutation fares, plus charges for transfers or any number of combinations, but the base fare of 11 cents if the Company's predictions are true, will have to be experienced in 1930.

Q. The last line to the left-hand side, wage income, that should be wage increase, shouldn't it? A. That's right. That's a typographical error.

Q. Mr. Wolf, this exhibit would indicate that if the Company's apprehension as to the future are correct that an increase in fare to a straight fare of ten cents would only stem the tide for two years, is that correct? A. That's correct.

Q. Have you prepared an exhibit entitled "Results of operations in 1927 compared to operations in 1922? A. I have.

(Mr. Tingley) I ask that be introduced in evidence and marked People's Counsel Ex. No. 36.

NOTE: Statement referred to is here filed in evidence and marked People's Counsel Ex. No. 36.

(The Witness) Going back to the Company's Ex. No. 7C, it will be seen that operating revenue estimated for 1927 is $16,246,109. In view of the fact that this amount is so close to the amount actually experienced by the Company in 1922, it seemed to us that some comparison of results in these two years might be illuminating, so that the third column is showing 1927 results, corrected for 1922 operating costs.

Starting with the $16,246,109 operating revenue, operating expenses have been estimated at $10,195,997, arrived at as shown in the foot notes in this way. The actual operating expenses in 1922 were $10,429,123. The economies claimed to have been instigated since 1922 total $1,200,000, hence other things being equal 1927 operating expenses should have been $9,229,123. Since that time there has been an increased wage of three cents per hour, amounting to $390,000 on the present base and there has been a slight up-trend in the cost of living, which of course would reflect thruout the cost of operation, amounting to about 3% or $276,874. Adding these amounts, the operating expenses for 1927, would be $10,-195,997.

Taxes are taken the same as is estimated by the Company, namely, $1,626,472, leaving an operating income of

$4,423,640, and if non-operating income $171,000 is included, and deductions of $3,445,000 are made, there would be left net income of $1,149,640.

That is only of interest as showing the comparison between those two years.

Q. What comment would you make as to the significance of that exhibit, Mr. Wolf? A. I would conclude that if the property were operated as in 1922, and the economies claimed have been experienced, there would have been set aside this year a net income of $1,149,640.

Q. Mr. Wolf, have you prepared an exhibit entitled, "Comparison of costs of superintendence, in 1925 and 1926"? A. I have.

(Mr. Tingley) I ask that be introduced in evidence and marked People's Counsel Ex. No. 37.

NOTE: Paper just referred to here filed in evidence and marked People's Counsel Ex. No. 37.

NOTE: Commission adjourned for the purpose of taking a Short Recess.

AFTER SHORT RECESS.

DIRECT EXAMINATION.

(Continued)

By Mr. Tingley:

Q. Mr. Wolf, will you comment on exhibit No. 37. A. This is a comparison of the cost of superintendence in 1925 and 1926, taken from the Company's figures. Under each account as shown on the left is shown the amount of money charged in 1926 for superintendence and other expenses. The Commission will recall that each major account is divided into superintendence and a number of other sub-divisions. Ways and structures, for example, were charged with $66,356, for superintendence in 1926, and $786,176 for other expenses.

Following on across, superintendence in 1926 was $2,683 more than in 1925 or an increase of 4% while all other expenses decreased $117,147 or 14.9%.

Equipment was charged with $35,433 with superintendence and $882,297 for other expenses, being an increase of $6,292 or 17.7% for superintendence, as against $41,530 or 4.7% for other expenses.

Power showed a decrease of 3.1% for superintendence and an increase of 3.8% for other expenses.

Transportation showed an increase of 2.4% for superintendence and a decrease of 1.4% for other expenses.

Traffic showed a decrease of 11.4% for superintendence, the charges for other expenses being a credit to this account.

General and miscellaneous, which includes salaries and expenses of general officers only——

(Mr. Howard) You mean by that it includes only those——

(The Witness) It means under the head of superintendence for the amount of general and miscellaneous are included only the salaries and expenses of general officers, amounting to $138,366. In 1926 other general and miscellaneous expenses totalled $1,390,416, these figures being an increase of 9% for superintendence and 3.7% for other expenses.

In total, superintendence, in 1926, cost the Company $729,742, being an increase of $31,255 or 4.3% over 1925.

Other expenses were charged $9,225,277, which were actually $21,958 or 2% less than was experienced in 1925. In other words, while other expenses were decreasing $21,985, superintendence was increasing $31,255, so that the net result for 1926, on all operating expenses was actually $10,000 more than for the year previous.

Q. Mr. Wolf, have you prepared an exhibit entitled "Annual depreciation allowance equivalent to company's claims for condition of property as of December 31st, 1923"? A. I have.

(Mr. Tingley) I ask that be introduced in evidence and marked People's Counsel Ex. No. 38.

NOTE: Statement above referred to is here filed in evidence and marked People's Counsel Ex. No. 38.

Q. Will you comment on that exhibit, Mr. Wolf? A. An attempt has been made in these next few exhibits to compare the claims for depreciations or condition of its property made by the Company in 1923 and those made at the present time of asking for an annual depreciation allowance.

Q. There has been a little change, hasn't there? A. Considerable. I might point out that in 1923, in the valuation of 1923, the Company's witnesses were careful to note that this claim for the condition of property was based only on the actual physical condition, and that no allowance for obsolescence or inadequacy was considered, but in the Commission's findings as of the same date, the Commission was careful to point out that the depreciation it considered was depreciation arising from whatever causes.

This exhibit No. 38 shows in the first column, the company's estimate to reproduce its property under the various items of track and roadway, etc, totalling $56,208,207 for depreciable property, $2,596,381 for land and right of way, which was not depreciated and $18,274,663 for overheads, which are likewise not depreciated, or a total of $77,079,251, cost to reproduce new.

(The Chairman) You say that was the company's claim?

(The Witness) Yes, this whole exhibit now, was the Company's claim. I have another one on the Commission's allowance.

(Mr. Clark) That claim was of 1923?

(The Witness) December 31st, 1923.

(Mr. Clark) And that was the Company's claim in the valuation case?

(The Witness) That's right.

(Commissioner Harper) That was for all property except easements?

(The Witness) Yes, sir, and going value. In the second column is shown the weighted accrued percentage for depreciation of each major account as given by the

Company's witnesses in that case. For example, 14.28% track and roadway and so on down, total 11.749% weighted for all the depreciable property and 8.56% for the total depreciable property, physical property and overheads.

In the next column is shown the age of that property, as of the valuation date so far as we made make it out. We went back and studied each item of each account to try to get at the year in which it was constructed and hence its ages as of the date of the valuation. We find for example, if our information and studies are correct, that the track and roadway at that time, at an average age of 15 years; that bridges, tressels and culverts had an average age of 20 years; electric system ten years; buildings, 20, and so on, showing a weighted average of the entire property of 14,232 years which would have been the same as if the whole property had been constructed in 1909.

The next column headed "Percent," "Average annual depreciation," is gotten at by dividing the accrued depreciation percent by the age and the last column, headed "Average annual depreciation dollars" is simply the multiplication of this percentage by the total cost to reproduce new.

What we are here trying to get at is the total amount of money which the company should have set aside each year from the time its property was constructed until December 31st, 1923, the date of its valuation, in order to have built up a reserve which would just equal the depreciation on the Company's property at that time. This works out to a weighted percentage of .825 for the depreciable property or $464,035, and to .502 on the total physical property, depreciable property and overhead, or a like amount of $464,035 per annum.

So that had the Company set aside then $454,035 per year in 1923, the date of the appraisal, it would have amounted to $6,604,116, as shown on the extreme right which was the total depreciation, admitted by the Company in its valuation case.

(Mr. Howard) You say, had it set aside that amount from what date?

(The Witness) From the beginning of the construction of its property.

(The Chairman) You said from 1923.

(The Witness) To 1923. The weighted year in which the property was built was 1909.

(The Chairman) Yes.

(The Witness) So that they set aside this amount of $464,000 from 1909 to 1923 inclusive, they would have had an amount equal to $6,604,000 or the same as claimed by the Company as the amount of its depreciation.

(Mr. Howard) You mean set that aside in addition to providing for actual retirements, don't you?

(The Witness) No, I am talking about a different thing, Mr. Howard. I am talking about depreciation now. This is the depreciation on this property that was valued on December 31st, 1923.

(Mr. Howard) On such of it as remained.

(The Witness) On such of it as existed.

(Mr. Markell) Just ignoring everything that passed out in the meanwhile?

(The Witness) Considering the property that was actually valued, and also considering the dollar had maintained the same value thruout that period.

(Mr. Tingley) Retirements will be covered in another exhibit, Mr. Howard.

(The Witness) This is covered as if there had been no retirements on this particular property during that period, that's right.

Q. Mr. Wolf, have you prepared an exhibit entitled, "Annual depreciation allowance equivalent to Commission's finding of condition of property as of December 31st, 1923"? A. I have.

(Mr. Tingley) I ask that that be introduced in evidence and marked People's Counsel's Ex. No. 39.

NOTE: Statement above referred to is here filed in evidence and marked People's Counsel Ex. No. 39.

(The Witness) This exhibit is gotten up the same as exhibit No. 38 with the exception that there are used those figures actually found by the Commission as representing the fair cost to reproduce new and the accrued depreciation existing at that time. The Commission found that $68,481,685 was the fair cost to reproduce new the physical property and overhead, and that from this amount should be deducted, as shown on the extreme right of the exhibit, $8,441,250, accrued depreciation.

Had the dollar maintained its value thruout the life of the property, the Company should have set aside $582,186 per year in order to equal this depreciation found by the Commission, which depreciation, as I said a while ago, covered depreciation from whatever cause, not alone physical, but obsolescence and inadequacy. This is .85% of the cost to reproduce new, and this is the amount which should have been set aside annually to represent that depreciation.

(Commissioner Harper) Is that arrived at by multiplying the annual depreciation by the age of 14.5?

(The Witness) The final figure, Senator, is arrived at by dividing the annual depreciation in dollars by the cost to reproduce new to get a weighted percentage.

Q. Mr. Wolf, have you prepared an exhibit entitled "Annual depreciation allowance based on percentage considered in valuation cases No. 533"? A. I have.

(Mr. Tingley) I ask that be introduced in evidence and marked People's Counsel Ex. No. 40.

NOTE: Statement above referred to is here filed in evidence and marked People's Counsel Exhibit No. 40.

(The Witness) This establishes an attempt to interpret the factors found in the last two exhibits into actual practice. Depreciation of course, should be set aside on original cost, rather than anything approaching reproduction cost or whatever figure the Commission may set as value. That's set out in our accounting rules and is the practice very generally followed by Commission.

The Company claimed on December 31st, 1923 that the original cost of its property was $68,158,908. This figure was vigorously disputed by People's Counsel and the Commission made no finding on it, obviously of course, because it was impossible to actually determine the original cost, but I have taken here what I think would be the maximum allowance.

To this figure I have added such additions to December 31st, 1926, an average for that year of $2,545,412, giving a total original cost of $70,704,320. Applying the percentage of .602 as found in Exhibit No. 38 based on Company's claim in the valuation case, the Company would be entitled to an annual depreciation of $425,640, and applying the percentage obtained as a result of the Commission's finding of conditions, which finding included depreciation from whatever cause, the Company would be entitled to an annual depreciation allowance of $600,987.

(Mr. Howard) Mr. Wolf, aren't you ignoring the time there and basing it only on accrued depreciation?

(The Witness) No, sir. I am considering here, Mr. Howard, the amount of money which the Company should set aside each year after 1923 in order to maintain its investment at that time.

(Mr. Howard) Presuming that all retirements are otherwise taken care of?

(The Witness) I presume that whatever retirements——

(Mr. Howard) Would come out of this?

(The Witness) Would come out of this.

Q. And would be taken care of? A. And would be taken care of from this amount if the Company's claim for depreciation and the Commission's claim for depreciation in 1923 were correct.

Q. Mr. Wolf, let me ask you just one other question. In comparing the service rendered by the Company in 1913 with that rendered by the Company today, did you take into consideration the fact that a longer ride can

be obtained on the properties of the Company at the present time than in 1913? A. I did.

Q. In other words that the property has been extended? A. I did.

(Mr. Tingley) Mr. Wolf is with you for cross-examination, Mr. Howard.

(Mr. Howard) Suppose those that are on the same side cross examine now and we can start to cross examine after recess.

(Mr. Benson) If your Honors please, I would like to ask him a few questions, but I don't know which side I am on.

CROSS EXAMINATION

By Mr. Benson:

Q. Mr. Wolf, without referring to the number of these particular exhibits, there are one or two or three particular exhibits that you prepared with the idea of showing the point at which an increase in carfare would be burdensome, and then there was another point where it would be what other term did you use? A. Exceed the value of the servce.

Q. Exceed the value of the service? A. Yes, sir.

Q. Now I want to ask you whether on the Halethorpe line, which is five and three-eighths miles, by air line from the center of Charles and Baltimore Streets to Halethorpe, as compared with the other lines running out into the suburbs, whether that isn't at present a burdensome fare on the Halethorpe line? A. Is that considering the two fares to Halethorpe?

Q. Yes? A. I didn't study that in particular, Senator Benson. It seems to me that a passenger out there has the same privilege of a passenger any place to ride anywhere on the Company's system, after he gets on the first fare zone.

Q. Well you happen to know that in the 1924 case the Commission decided the Sparrows Point case in a meas-

ure of fares from the center of Charles and Baltimore streets, don't you? A. Yes.

Q. Now I am asking you on that same measurement that was established by the Commission in the 1924 case, whether at present Halethorpe is not having comparatively burdensome fare with these other points? A. Well to give you a full answer I would like to apply some of the tests to that, Senator, as we applied in these other cases, as to whether or not the riding is falling off on that line.

It is the test that we attempted to apply to determine burdensomeness rather than a comparative length of ride, or a comparison of what the passenger might get.

Q. That wasn't applied in 1924 on that other line, was it? A. I don't recall that it was.

Q. Now let me ask you a question to see if I can get an answer out of you. If they increase the fare to 20 cents would that be a burdensome fare to Halethorpe? A. I would think so.

Q. Would it be beyond what the service is worth, in your opinion? A. I think it would be beyond what the present service is worth, yes.

Q. What would that be per mile, in round figures? It would be nearly four cents, wouldn't it? A. Taking it to the center that you took it.

Q. The same point that the Commission took it four years ago, isn't it? A. The same point that the Commission took the Dundalk case, yes.

Q. The extensions were made in 1924? A. Yes.

(Mr. Benson) That's all.

CROSS EXAMINATION

(Continued).

By Mr. Toole:

Q. Mr. Wolf, on exhibit No. 20 about the Charles Street but line, your exhibit shows that as they raised

the fare in most cases the number of riders fell off? A. That's right, there was one exception.

Q. Now, what I want to ask you is, is it not true that the people who patronize the Charles Street buses are better able to pay ten cents than the average rider? A. I think that's fair.

Q. And yet they fell off, being better able than the average rider? A. Yes.

Q. Now exhibit No. 25, San Francisco, you didn't investigate the San Francisco Municipal lines? A. No, I did not. There has been no finding of any kind as to value of any of its properties, except the report in the last few days of Mr. Wilcox, and I couldn't get any information on those.

Q. Have you any idea of what the Market Street Railway, what their rate of wages are? A. I think I have that. The Market Street Railway is paying 56c an hour for platform labor.

Q. That's in excess of the Baltimore rate. A. At the present time that's right.

Q. And the fare is five cents? A. I think there is now an application which has recently been made for an increase to six cents.

Q. But not for the Municipal Lines? A. I believe that's what precipitated the investigation that the City is now making with a view to perhaps taking over all lines.

Q. Now do you think it a rather healthy situation in San Francisco to have one line operated by the city, in competition with the other lines? A. I don't think competition in this utility business is ever of any material benefit where you have regulation.

Q. You rather believe then that it would be better for the City to take them all over? A. I wouldn't say that. I would say that proper regulation of whoever owns it would produce the best result.

Q. But obviously the report of the Municipal lines have a better showing than the privately owned lines,

isn't that true? A. I don't have those figures Mr. Toole. I couldn't speak of that a better showing? In what way do you mean?

Q. Well mostly everything. Don't you think that competition even with their added expense of operation by having diverse lines, don't you think that the Municipal line has been successful or has been responsible for keeping the five cent carfare in San Francisco? A. I think they have a five cent fare in Los Angeles too. Do they have a Municipal line there too? I wouldn't say the Municipal line was the answer to it.

Q. According to a newspaper report I read the other day, it seems that the five cent fare has vanished in Los Angeles, that New York and San Francisco are the only lines that have five cents and New York is subsidized, but there is a straight five cent fare in San Francisco on Municipal Lines and privately owned lines. A. I would take it that that was the fare they were able to earn a return on under regulation.

Q. But they get a return on the five cent fare? A. San Francisco gets a 5.37% return.

Q. Have you any figures that would show what return the municipal lines would get? A. No. I haven't any figures on that.

Q. I have the figures somewhere.

CROSS-EXAMINATION (Continued).

By Mr. Clark:

Q. Mr. Wolf, turn to your exhibit No. 24, will you please? A. Yes.

Q. How many cities are involved in that study. A. 81.

Q. Did I understand you to say that you found only one city over 100,000 population having a straight fare exceeding 7 cents? A. No, sir.

Q. What was it? A. Only one with a straight ten cent fare.

Q. In your studies of that subject did you find the tendency towards or from the flat fare in large cities? A. The tendency always to give a token fare or something in place of it such as passes.

Q. You found very few cities in which there was a flat fare without recognizing at all the frequent rider above the casual rider? A. For example, the only city, receiving a straight eight cent fare is Trenton, N. J. The only cities receiving a straight seven cent fare are Memphis, Tenn., and New Orleans, and Reading, Pa.

The only ones receiving a straight six cent fare are Duluth, Minn., and El Paso, Texas.

Q. Did you mean by a straight fare, a flat fare? A. without any tokens, that's right.

(Mr. Benson) Mr. Wolf, the ten cent fare in Boston is not limited to the city of Boston, but covers that Metropolitan era, doesn't it? It goes over into Cambridge and into a number of other cities adjacent?

(The Witness) That's right.

(Mr. Howard) Mr. Chairman, I would suggest that as Mr. Nodder's exhibits tie in with some of these exhibits, that Mr. Tingley put Mr. Nodder on before we cross-examine Mr. Wolf.

(Examination suspended.)

NOTE: The Commission then adjourned for the purpose of taking a Recess.

AFTER RECESS.

Thereupon—

CHARLES NODDER,

a witness of lawful age, produced on behalf of the Public Service Commission, having heretofore been duly sworn, according to law, and whose examination was suspended for the purpose of hearing other witnesses, resumed the stand, was examined and testified as follows:

DIRECT EXAMINATION.

By Mr. Tingley:

Q. Mr. Nodder, have you prepared any exhibit entitled "Operating Revenues, expenses, non-operating revenues, deductions, from gross income and net income for the first six months of the years 1926 and 1927"? A. I have.

(Mr. Tingley) I ask that be introduced in evidence and marked People's Counsel Ex. No. 41.

NOTE: Statement above referred to here filed in evidence and marked People's Counsel Ex. No. 41.

Q. Mr. Nodder, will you comment on that exhibit? A. This exhibit consists of 12 sheets and is a detailed statement of revenues and expenses by months for the years 1926 and 1927.

The exhibit has been prepared in this form so that the Commission may have before it in much greater detail than is ordinarily shown by statements prepared in strict compliance with the Commission's classifications. It shows the income and expense accounts for those two years. The statements follow the Commission's classification, but each account is divided according to the several sources of reveue or the classes of expenditures as shown by detailed records carried by the Company.

The first sheet shows the sources of revenue for the first six months of the period. I might say, first of all that these 12 sheets are divided two ways. The first six cover the first six months of the year, and the last six cover the second six months of the year. It was just impractical to make such a long sheet that would show 12 comparative months on one sheet, so for that reason they have been divided in that manner. It will be quite proper to take sheet No. 7, for instance, and fasten it on the end of sheet No. 1 for a continuous year's study.

The first part of sheet No. 1 as I have already explained, covers the various sources of revenues. For instance, taking the first column, January, 1926, the first item is passenger revenue. That followed by special

car revenue, mail revenue, items received in the conscience fund and various other miscellaneous.

In the next line giving a total revenue from transportation in January for instance of $1,392,453.54.

Then follows revenues from other railway operations, car advertising, station privileges, parcel room receipts, rent of equipment, etc., showing the total operating revenues for the month of January of $1,403,387.09.

Then follow the operating expenses. On the first sheet the operating expenses are just shown by general accounts, the account ways and structures, the account equipment and power, etc. Details are shown of those operating expenses on the following sheets. For instance, Sheet No. 4 is a detail of the ways and structures. Sheet No. 4 also covers details of the equipment expenses.

Sheet No. 5 covers the expenditures for power, and on the same sheet are details of the account conducting transportation.

On sheet No. 6 details of the traffic account, and on the same sheet details of the general and miscellaneous accounts, and transportation for investment credit.

(Mr. Howard) What does that last thing mean by the way?

(The Witness) Transportation for investment credit is the account that's carried in the Commission's classification as a credit to the previous accounts for expenditures made generally in transportation of materials for construction work.

In other words if a work car, for instance, travels to do certain construction work, capital accounting, the cost of running that thing is not taken out individually out of these separate items. It's rather a hard thing to do, so one account, No. 7, general account, Transportation of investment, covers those expenditures. It's a credit against operating expenditures for construction work. It's covered by the Commission's classification.

(Mr. Clark) Mr. Nodder, what is meant there by conscience fund? How is that made up?

(Mr. Howard) That seems to be an insignificant item.

(Mr. Clark) But it's interesting.

(The witness) It's miscellaneous receipts from various people.

(Mr. Toole) Do they give their address, Mr. Nodder?

(The Witness) Sometimes, and sometimes not.

(Mr. Toole) Spring Grove?

Q. This isn't the corporations' conscience, but the individual's conscience? A. The individual's conscience. It is the return by a customer that has gipped the conductor out of a token and feels he owes the United something for that. In some cases they compute interest.

(Mr. Markell) What rate of return?

(Mr. Toole) Have you any record there of the Railway Conscience Fund?

(The Witness) No, the railway has no conscience, I understand. Now sheet No. 2 is a continuation of the income account, starting with taxes and the various classes of taxes are there set out. Deducting the taxes from the net operating revenue, which is brought forward to this sheet, gives an operating income on the next line. Then follows non-operating income, under which are detailed the various classes of non-operating income, income from lease of road, for instance, miscellaneous rent income and so on down the line.

Then follows deductions from gross income, covering rent of leased roads, miscellaneous rents, and that account is continued on sheet No. 3, interest on funded debt, interest on unfunded debt, and so on, the balance of the income accounts, and the last line on sheet No. 3, is the net income transferred to profit and loss.

As I have already explained, the same proceeding covers sheets 7 to 12. It's the same general outline as sheets one to six.

The only comment I might make on the last six sheets is that I have two totals for the year ended December 31, one before closing and one after closing. At the end

of the year there are always certain little adjustments that are made after everything is closed up to bring the books in accordance with actual facts, and I have used these two totals. The first one is the total of the previous 12 months' figures. I had to put that in to show those 12 months' additions and the last one I put in to match the figures of the annual report and the figures that have already been filed in this case.

Q. Mr. Nodder, have you prepared an exhibit entitled "Depreciation 1912 to August 31, 1927"? A. I have.

(Mr. Tingley) I ask that be introduced in evidence and marked People's Counsel Ex. No. 42.

NOTE: Statement above referred to here filed in evidence and marked People's Counsel Ex. No. 42.

Q. Will you explain that exhibit to the Commission, Mr. Nodder? A. This exhibit consists of four sheets and deals with depreciation. The first sheet of the exhibit is an analysis of the depreciation reserve at present on the Company's books from January 1, 1912, when the reserve was first started, to August 31, 1927. The first column of this sheet, headed "Provision," represent the amount charged to operating expenses for depreciation during the years shown, and correspondingly set up in the reserve. The next three columns show charges to the reserve for retirements of property, etc. The first column of this group are the charges actually made during each particular year. The column headed "Less items credited and transferred" represent adjustments which were subsequently made to the reserve, but which have been applied to the particular year to which they belong. These items are shown in detail on the bottom part of that first sheet.

The third column in that group is the revised charge against the reserve for the particular year. The next column, "Balance for respective years," shows the balance remaining in the reserve for the particular year after the credit is made for provisions, charges to operating expense, less retirements and the last column is an accumulated balance at the end of the particular year.

This shows that August 31, 1927, there was a balance in that reserve of $1,413,792.79.

(Mr. Howard) You carry that down and put it under the next preceeding column?

(The Witness) The next to the last column is the balance for the particular year. Those are all added. The last column is a comulative balance and of course naturally the two figures agree.

Sheet No. 2 is submitted to show the requirements of the Company to take care of its retirements, based on retirements actually made since the beginning of the depreciation reserve. The statement shows all retirements made both those charged against the reserve, those charged to profit and loss and those charged in suspense awaiting further disposition, the latter item consisting chiefly of the 319 cars which were burnt up and to which some discussion has been made about insurance in this case.

The first column in this sheet shows charges made against the depreciation reserve during the peorid January 1, 1912 to August 31, 1927 amounting to $9,124,-168.12.

Q. That's for retirements? A. That's for charges against the reserve as shown in sheet No. 1 of this exhibit.

To this has been added retirements which have been charged to profit and loss $426,558.44, and charges for retirements charged to the property abandoned charged up to operating expense account, $1,076,062.63.

The total charges during the period are shown in the next column, and aggregate $10,626,789.19.

Now from these figures have been eliminated two items. The first charges which have been made against the depreciation reserve and which are not retirements. The first one of these is the item of car truck payments shown in that column, $96,250, and the next one, the item of $1,252,330, is a proportion of the power bill which was charged to the depreciation reserve in connection with the sale of the Pratt Street Power House. In

other words, during the period as I recall, from 1921 to the middle of 1926, instead of charging the entire power bill against expenses, a proportion of it was charged to this depreciation reserve, and that amounted to about a million and a quarter.

(Mr. Clark) How does that show on the books?

(The Witness) It's charged against the depreciation reserve.

(Mr. Clark) Is that reflected in this balance here?

(The Witness) Yes sir.

(Mr. Clark) You mean this balance will be just that much more if it had not been for that charge?

(The Witness) That's correct. The next column, uncompleted work, charged against the reserve is shown as $572,792.36. This item represents charges for work which is not yet completed as its title implies.

(The Chairman) What's the character of the work?

(The Witness) I was just going to explain that, Mr. West. It might be advisable at this point to explain pust how accounting is made for the first item on this sheet, track reconstruction and renewal, etc. It is the practice of the Company in making a reconstruction or renewal of track to charge the entire amount as the work is progressing to an account, depreciation expenditures, which at the end of the year is charged to depreciation reserve. In other words that is the debit side of the depreciation reserve. At the conclusion of the project certain computations are made to determine the cost of the work which has been replaced or reconstructed, and the excess cost over this estimated original cost of the old work retired is taken out of the account and charged to fixed capital. In other words, the depreciation expenditures account, and in turn thru its being charged to the depreciation reserve, the depreciation reserve is a clearing account in part for work in progress, so that there are charges in this total column of sheet No. 2, there are certain charges in there for uncompleted work. One specific item I have in mind is this Bel Air Road job which is something like a quarter of a million dollars

charged in there and the work is not completed, and a part of that will subsequently be taken out of there and charged to fixed capital, and for that reason I have eliminated those items?

(Mr. Howard) Eliminated them toto?

(The Witness) Eliminated them in toto.

(Commissioner Harper) And for that reason you can't charge that amount to the depreciation reserve?

(The Witness) Can't charge that to the depreciation reserve, nor can you charge that to the fixed capital account.

(Mr. Clark) You mean by that that there is, you might say, a temporary loan made by the depreciation account until the construction is completed and then taken care of from new capital?

(The Witness) You might put it that way. It's merely a method of charging such stuff.

You first charge against this depreciation reserve and then take it out and charge it to fixed capital. It's not a matter of a loan exactly.

(The Chairman) So much of it as may be applicable to fixed capital?

(The Witness) That's correct.

(Mr. Clark) Or plant extensions?

(The Witness) That's correct. That of course only applies to items of reconstruction of renewals. Ordinary capital items which are not replacements or renewals are charged direct to fixed capital and do not enter into this at all.

(Mr. Clark) I see you have that coupled with items not retirements. In other words coupled with the $1,152,330.

(Tne Witness) That's right.

(Mr. Clark) Is that in the same class?

(The Witness) No, because I have eliminated those

two items from my total charges. The next column is the end of the column total and the two columns eliminating——

(Mr. Howard) With this item taken out altogether?

(The Witness) With that item taken out altogether.

(Mr. Clark) You have the total there $1,152,330, and then after that you couple——

(The Witness) Total charges against reserve are $10,626,000.

(Mr. Clark) I was looking at the Pratt Street Power House figure up there.

(The Witness) That entire item was eliminated.

(Mr. Clark) While we are here, let me get that straight in my mind. What does this mean in brackets, power bill?

(The Witness) That, as I have explained is a portion of the power bill, that is the bill rendered by the Consolidated for power supply. A portion of that bill was charged against the depreciation reserve rather than against operating expenses.

(Commissioner Harper) That portion wasn't included in operating expenses?

(The Witness) That's correct.

(Mr. Clark) That whole item refers to the sale of the Pratt Street Power House, doesn't it?

(The Witness) It refers to that, yes sir.

(Mr. Clark) And in writing that out of capital just what is the relation of the power bill to that transaction? The power house was sold?

(The Witness) And as a result of an agreement, I understand, between the United and the Consolidated, the details of which I am not very familiar with, a portion of that power bill subsequently was charged against the depreciation reserve as I understand it to take care of certain depreciation which the United agreed to take care of for a certain period after the sale of the power

house, so that instead of setting it up separately as depreciation, it was included in the power bill and a proportion of that power bill was charged against this power bill rather than charge it to operating expenses as power purchased.

(Mr. Clark) I just can't see where there should have been any charge to the depreciation reserve resulting from the sale of the power house or the power bill. Probably I am a little dense on that, but I just can't see where there is any charge to the depreciation reserve there, where there was a retirement from capital. As far as that is concerned, it was a sale, the Company received the money, but it should be a charge to capital account, but I can't see how there should be a charge to depreciation reserve. Just make that a little plainer if you can.

(The Witness) As I say, I am not terribly familiar with the details of that contract, but as I understand it, it's this way.

The contract, as I understand, provided a certain amount of depreciation for a period of years on the Pratt Street Power House plant should be borne by the United. That's my understanding of it. And instead of billing that separately, instead of the Consolidated billing that separately as a separate item, it entered into the rate per KWH at which the power was supplied or sold to the United. Now of that charge a certain amount was segregated as being the depreciation arising out of that contract, and as such was charged against the depreciation reserve.

(Mr. Clark) Do you know whose calculation that was? The Gas Company's or the Railway Company's?

(The Witness) I believe that the former Chief Auditor of the Commission had something to do with setting up that particular amount.

(Mr. Clark) You were just here giving the results as shown by the reports of the Commission?

(The Witness) By the Company's books.

(Mr. Clark) And the files of the Commission?

(The Witness) Yes, sir. No, this is shown by the records of the Company.

(Mr. Clark) Yes, by the records of the Company. Well, have you examined the whole matter enough beginning with the sale of the Power house up to the time these entries were made to be able to say to the Commission that you approve or disapprove of those entries?

(The Witness) I have not. They were approved by the former auditor and I haven't gone over that particular feature of it.

(Mr. Clark) Possibly I could be convinced, but I can't see where there should be any charge there of a million dollars to depreciation.

(The Witness) As a matter of fact, Mr. Clark, I am not defending it, but I have eliminated it against the total charge against the reserve if you will notice.

(Mr. Clark) Yes, but you say in that connection, without that elimination, the balance over here in the reserve account would be increased to that effect.

(The Witness) That's a fact. In other words, if that charge had not been charged against the depreciation reserve, the depreciation balance would show one million two four.

Q. That's arithmetic? A. That's arithmetic.

(Commissioner Harper) In your column of net, it's not included in it.

(The Witness) Yes, that's the net between the item total $1,626,789.19, and the total of the items $1,348,580, and $572,792.36, or a net of $8,705,416.83.

By dividing that amount of $8,705,000, by 15 and 8-12's years it shows the average retirements per year amount to $555,664.90, and that's the object of this exhibit, to show the average retirements over a period of fifteen, practically sixteen years.

(Mr. Clark) In bringing down that average you mean you have eliminated that power house matter?

(The Witness) Yes, sir, as I understand it a depre-

ciation allowance is an amount which is chargeable to expense, to return to the investor the amount of his investment consumed in operation during a given year. That's the fundamental basis of depreciation. This Commission's classification and most of the authorities require that depreciation be based on cost of property as opposed to values or other methods. In considering depreciation a difference too should be drawn between replacement reserves and a depreciation or retirement reserve. The former is intended to provide a reserve which at the expiration of the life of a piece of property will have accumulated sufficient funds to provide for a replacement of the property at the enhanced cost of new property. A depreciation or retirement reserve as I have stated is intended to be a return of the investment actually made and must necessarily be based on cost. As the Commission well knows the ideal way to compute depreciation is to do so on the basis of each separate item of property or equipment.

This, however, is impracticable and therefore various methods are devised to facilitate the preparation of such an estimated allowance. This Company has taken a 5% of its gross revenue. One way of checking such results is in an estimate such as is shown on sheet No. 2. When the Company begins business with new property, new equipment, etc., a considerable period lapses before any large amount of retirements occur. After the first cycle passes, retirements occur with fairly constant regularity and after that time the average amount of retirements experienced annually becomes a fairly good criterion of the actual amount of depreciation suffered.

This is the main reason for the submission of this exhibit. By 1912 when this depreciation reserve was started, this Company had passed the first cycle of newness, so to speak, and the average of its retirements during this period is a fairly reasonable estimate of what it's retirements will be, at least for the next few years. The difference between this average, that is the average of $555,000 shown by this exhibit and the amount charged to expenses in 1926, which was $825,000, or slightly under a quarter of a million, is a fair allowance, I believe, for anticipated retirements of property, items of which have not yet been retired, due to their cycle of life, exceeding the period cov-

ered by the Company's history, for instance, certain buildings.

The impracticability of providing a depreciation reserve to take care of future replacements at enhanced value is patent when it is considered that in practically no instance is a replacement made in kind. In case of track, for instance, seldom if ever, is track replaced exactly as torn up. Generally greater weight of track is laid, or changes made in type of paving, etc.

On the other hand, the fact that a structure will not be replaced at all, but will be abandoned, or as in the case of the Mt. Washington Bridge, of which we have already heard, maybe substituted by another structure at no cost at all to the Company and this shows the fallacy of this method. Thereby the utility gets a return on an enhanced valued of property and at the same time receives an amortization allowance at such increased prices. These things add to the uncertainty of any accurate forecast apart from being fundamentally in opposition to the entire theory of a return of actual cost of property extended in service.

Another feature in connection with the United's depreciation is the fact that due to its present method of accruing 5% of gross revenue as a depreciation allowance, it has been somewhat impracticable to follow the Commission's classification for property retired and not replaced. On page 19 of the Commission's classification the following instructions are given in connection with the retirement of property retired and not replaced. I am reading now from page 19 of the Commission's classification:

"When property other than equipment (which is provided for by account No. 41, 'equipment retired') is abandoned, demolished or otherwise retired from service and not replaced, the ledger value of the property retired shall be credited to the proper road and equipment account; account No. 443, 'accrued depreciation-road and equipment' shall be charged with the amount carried therein with respect to such property; proper account shall be taken of salvage and insurance; and the remainder, together with the expenses incident to the retirement, shall then be charged to profit and loss."

This requirement of the commission taken into consideration the fact that when property is abandoned and not replaced the loss occuring to the Company over and above

the amount of the depreciation provided in the reserve therefore, is a loss which the stockholder should be called upon to bear, thru its being charged to profit and loss. It is only where property is retired and replaced that the classification of the Commission requires charges to operating expenses be made for a balance of the cost of property which has already not been amortized thru a depreciation allowance.

This charge to operating expenses of course means that the rider pays for the retirement as opposed to the feature, that in cases of property retired and not replaced the stockholder bears the burden.

In this exhibit sheet No. 2 no separation has been made between these two classes of retirements, but in order to present to the Commission a picture of the total retirements made during this period, they have all been included under one heading. It might be pointed out, however, that the items in the second and third columns, that is retirements charged profit and loss, and retirements charged in suspense are items of this nature. They are not, however, the only items on the sheet. Even the elimination of these items aggregating as they do over a million and a half, would cause the average per year shown in the last column of this statement to be reduced to approximately $450,000.

Now go to sheet No. 3.

(Mr. Clark) Now, Mr. Nodder, before you go to Sheet No. 3, let me get another matter straightened out in my mind. Going back to Sheet No. 2, loss on cars sold and destroyed or as you say burnt up, $898,076.

(The Witness) Yes, sir.

(Mr. Clark) I see that has been added in the total of $1,330,845.

(The Witness) That's correct.

(Mr. Clark) Now that therefore is included in the $10,626,789?

(The Witness) Yes, sir.

(Mr. Clark) So what does that $10,626,789.00 represent? The total retirements?

(The Witness) That represents the total retirements with the exception of the two columns that I have eliminated. It's a combination of the total charges to the depreciation reserve and charges to profit and loss and suspense items for retirement. It's the total of those three items. In order to get to the net total retirements I had to eliminate the next two columns. In other words the entire sheet is a sort of a process of building up and tearing down, so to speak.

(Mr. Clark) What is the status now of that charge of $898,076?

(The Witness) That is now carried in suspense.

(Mr. Clark) It's still being carried in suspense?

(The Witness) It's still being carried in suspense.

(Mr. Clark) Why? Do you know?

(The Witness) Principally because if that million dollars there, which is the total of that column was charged to depreciation reserve, it would almost eliminate the depreciation reserve. It would bring it down to about four hundred thousand dollars.

(Mr. Clark) About six hundred thousand dollars.

(The Witness) No, less than that. The total if one million and 76 in suspense.

(Mr. Clark) Does that mean being held in suspense that there is any doubt as to where it should be charged?

(The Witness) I don't think so.

(Mr. Clark) It was used up in part before the depreciation reserve was set up?

(The Witness) That's correct. The item is being spread over a period of years, as an entry to profit and loss. In 1926, one hundred thousand dollars was charged to profit and loss of that item, or of an item of one million one hundred and 76, leaving one million and seventy-six in suspense.

(Commissioner Harper) You mean it will be wiped out eventually by being charged to profit and loss?

(The Witness) Yes, sir, instead of charging the entire amount immediately to profit and loss, and more or less breaking down that profit and loss account, it is being charged over a period of years.

(Mr. Clark) Is it simply being done for that reason, or as a matter of right? Should it be a burden on the present—

(The Witness) It's not a burden anywhere, because before the charge to profit and loss it's not an expense at all.

(Mr. Clark) It's not being carried to suspense then, not because it would reduce the depreciation reserve but because it's proper that it be amortized gradually over a period of years?

(The witness) That perhaps is the main reason.

(Mr. Clark) Has the method under which cars are purchased and the trust paid, anything to do with carrying that account in suspense?

(The Witness) Not that I know of. Now sheet No. 3 is a computation of what the reserve for depreciation would have amounted to if accruals had been made since 1899, that is the formation of the Company, on the same basis as is used at the present time, 5% of operating revenue. The first column of this exhibit shows operating revenue by years, since 1899 to August 31st of this year. The next column is a computation at 5% of the depreciation which would have been accrued if the 5% had been taken of operating revenue. The next column, retirements, shows the retirements made by the Company since 1899.

Taking these items separately, the last item of $8,705,-417, to which the note (b) is attended, is the amount shown on sheet No. 2 of this exhibit from January 1, 1912, to August 31st, 1927. The amount for the years 1904 to 1911, to which note (a) is attended represents the total retirements that were charged during that period to the extraordinary expense account which is the same thing

that is now called the depreciation expenditure account, but out of which in 1920 four million dollars was charged to fixed capital. In other words, back of those days, 1904 to 1911, the entire charge for reconstruction, renewals, etc., of track, etc., were charged against the extraordinary expense account, which in turn were charged to profit and loss. In other words there was no depreciation reserve in those days.

(The Chairman) How about the reconstruction of the tracks following the fire?

(The Witness) All were new trackage, etc. Now returning to that (a) item the total charged during that period to extraordinary expense was $6,417,184.59 and in 1920 there was written out of that account and charged to fixed capital $4,015,998.75, leaving net retirements for that period of $2,401,186.00.

Now for the period 1899 to 1903, due to the fire of which you just spoke, it's impracticable to get the actual retirements during that period. So that I took the average retirements between 1904 and 1911 and it figured out something like three hundred thousand dollars a year, as I recall and multiplied that by the number of years to give that figure of retirement, so that I get a total retirements during that entire period since 1899 to August 31st, 1927, of $12,531,603.00.

Now the next column is the balance which would have accrued in the reserve if the 5% had been set up as is now being done and if those retirements had been charged against it. In other words, the difference between the total 5% column of $14,327,565.82 and the $12,531,603.00 results, in a balance which should have been in the reserve of $1,895,963.15. This would have taken care of all retirements, both those that were charged against the reserve proper, those that were charged to profit and loss, and those that are now in suspense, and still would have had a balance remaining of $1,895,000.

Sheet No. 4 is a computation of the result which would have been reached had accruals been made to the depreciation reserve on the same basis as that now claimed by the Company.

In company Ex. No. 24 there is shown a depreciation deduction of $2,200,000. Basing this amount upon the undepreciated cost to reproduce new of the physical property as found in the Commission's valuation, results in a rate of approximately 4%.

In sheet No. 4 of this exhibit this rate has been applied to the actual cost of the property as reflected in People's Counsel Ex. No. 13 in case No. 533, the valuation case. In that case it was shown that the property cost at April 1, 1899, amounted to $32,448,962.00, that's the amount shown in the first column, and that of that amount $8,404,-407.00 represents superseded property, of the horse and cable car periods which was still in the account, leaving a net cost at that date of $24,044,555.00. That is shown in the second column.

From this beginning there has been built up, or I should say from that beginning in People's Counsel No. 13 in the valuation case, there was built up by additions and retirements a cost up to December 31st, 1923, and from that date, I have added in book addtions up to August 31, 1927, so that the average of the period of eight months in 1927 as shown by the last item in the second column of this exhibit amounted to $49,842,589.

By the way, I should have stated that those costs were average fixed capital during the period. In other words, it's the fixed capital at the beginning of the year and end of the year, averaged to make an average for the year.

Q. An average yearly cost? A. An average yearly cost. To these average yearly costs has been applied 4% depreciation, that being the percentage I have already explained as the Company's claim. For instance in the first year, take 1899 4% of $24,044,055, for nine months is $721,000. In the next year four per cent of the $25,167,-000 is $1,006,084 and down the line. 4% has been applied to each of the items in the second column. This would have resulted in a total accrual during that period of $44,-628,233.00. From that total there has been deducted retirements as shown in People's Counsel Ex. No. 42, amounting to $12,531,603, leaving a balance which would have resulted if these accruals had been made on this basis of $32,096,630.

Q. What per cent of property cost would that be? A. This is approximately 64% of the property cost August 31, 1927.

Q. Suppose the rate of 2% had been in the exhibit? A. The result would still have shown approximately $10,000,000 in the reserve over and above retirements.

Now following this out, if the same 4% were carried forward for the next 29 years, as has been shown in this exhibit—

(Mr. Clark) The plant would belong to the public, wouldn't it?

(The Witness) There would be a reserve of some 160% of the property cost which, of course, is a ridiculous situation.

(The Chairman) You haven't carried that forward, tho?

(The Witness) I haven't carried that forward. I think it shows on its face. It shows I think clearly that a 4% compounded rate would be very greatly in excess of the requirements.

(Commissioner Harper) You say that is based on the amount of $2,200,000 claimed by the Company?

(The Witness) Yes, sir, and that has been applied to the property set forth in the Commission's valuation.

Q. That resulted in 4% and that 4% was accepted.

(Commissioner Harper) And that's the percentage you have used here?

(The Witness) Yes, sir.

Q. Mr. Nodder, have you prepared an exhibit entitled "Accident and Damage Account?" A. Yes, sir.

(Mr. Tingley) I ask that be introduced in evidence and marked People's Counsel Ex. No. 43.

NOTE: Statement above referred to is here filed in evidence and marked People's Counsel Ex. No. 43.

Q. Will you explain that exhibit, Mr. Nodder? A. This exhibit is an analysis of the accident and damage

account since 1921. As explained by the heading of the exhibit the down-totals give the costs of accidents, occurring during the year shown. The additions across as far as the column "total expenditures" show payments actually made during the respective years. I think that's clear. During 1926, for instance, accidents actually applicable to that year, accidents actually occurred in that year amounted to $628,657.44, whereas settlements made during 1926 are carried in the cross total under expenditures of $560,477.15.

For 1927, payments are shown for the nine months ended September 30th, and an estimate was prepared of the 1926 and prior year claims still outstanding at December 31, 1926. They are shown on the next line. This is shown by the exhibit to be in total $139,046.73.

Now in the recapitulation at the bottom of the sheet there is shown for easy reference the costs applicable to the respective years, the expenditures made in the respective years so that a comparison may be made with the provision made, and by provision I mean the charge that was made to operating expenses for accidents and on the converse side put in the accident reserve account. The next column shows the percentage that that provision bore to percentage revenues. I think it's been explained already that the Company's accident reserve is based on a percentage at the present time of 3¼% of passenger revenues. It will be noted that in the six years shown by this exhibit the total charges to operating expenses for accidents amounted to $3,446,927.18, while the actual costs for injuries and damages for accidents occurring during those six years were $3,304,925.32, or an excess charge to operating expenses of $142,000.

The balance in the reserve as of December 31st, 1926, which was $302,160.97 should be adjusted by charges to profit and loss for claims paid during the period covered by this exhibit which were applicable to years prior to 1921, in excess of the balance in the reserve at December 31st, 1920. In other words, the claims paid during the period shown by the exhibit on account of accidents occurring prior to January 1, 1921, amounted to $430,000, whereas the balance in the reserve on December 31, 1920,

was $297,092.56. This would give a revised reserve at December 31, 1926, of $435,660.17.

So that's made up in this way. Take the reserve December 31, 1926, is $302,160.97. Claims for years prior to 1921, which were paid during the years 1921 to 1926, amounted to $133,499.20 in excess of the depreciation reserve at December 31, 1920. Adding those two amounts together would give a revised reserve at December 31, 1926, of $435,660.17.

(Mr. Howard) Don't you ignore, Mr. Nodder, the corresponding items that are not yet settled?

(The Witness) I have included those in the item "Estimated Balance 1926 and Prior Years," Mr. Howard, the next to the last line of the top part of the statement. You will notice in 1926 $108,559.43, the next to the last item on the top part of the statement. Do you get that?

(Mr. Howard) I see that.

(The Witness) At December 31st, 1926, claims were unsettled upon which the Company estimates to pay $294,867.51, so that if the proper corrections had been made——

(Mr. Markell) Where is that?

(The Witness) That's the addition of the amounts paid in the nine months of 1927, which is $155,820, and the estimated balance. In other words, I took the actual payments in 1927 for 1926 claims and prior and added to that the estimated balance at September 30th for those prior year claims. Those two amount to $204,867.51.

So that if the proper corrections had been made to the reserve of which I have already spoken that reserve would be $140,000 in excess of the requirements. Even without making this adjustment the reserve at December 31, 1926, which was $302,160.97, was about $8,000 greater than the estimated outstanding claims at that date. That is including the actual paid for nine months plus the estimate of what is outstanding at December 31, 1926, for 1926 and prior years' claims.

An examination of the recapitulation of this exhibit, as I have already stated, shows that the charges to op-

erating expenses have during the six years shown hereon, been greater than the claims actually paid for the period, so that for the year 1927, it would seem proper to use this excessive accrual of former years to take care of any increased cost this year. So that any estimates for 1927, which include a higher rate of accident costs I think should be eliminated because it has already been taken care of in the past, and it's just as well to balance one against the other.

However, it will be noted that in years 1925 and 1926, provisions made through a charge of 3¼% of passenger revenue charges made to operating expense have been insufficient to meet the costs of claims during those years. In 1926, basing the applicable costs upon the estimate already mentioned, which is shown to be $628,657.44, indicates a deficiency in the charge to operating expenses of about $90,000. In 1925, this deficiency was about $50,000.

Taking all these things into consideration I am of the opinion that in computing an estimate for the year 1928 an additional allowance should be made to operate expenses of $75,000 per year.

This statement of accidents has been further amplified in Sheet No. 2 of this exhibit which is a little statistical statement of the number of accidents and the cost per accident. On the first line is shown the total number of accidents that were paid during the year. I have been unable to make any study of the accidents paid along these lines that were applicable to the year, but the general trend for this purpose I think is all right. These are the accidents actually paid during these particular years. In other words, in 1924 there were 4,162 claims settled; in 1925 there were 4,343 claims settled, and in 1926, 4,374 claims settled. Now the direct cost of these settlements, and by direct cost I mean the settlement was actually made to the claimant, amounted to $353,549.58 in 1924; in 1925 to $393,871.62, and in 1926 to $387,405.62, and to August 31 of 1927, $286,678.94.

The next line shows the direct cost per accident which ranges from $84.95 in 1924 to $99.58 in 1927.

The next item is the cost of accidents which I say is

exclusive of department salaries. In addition to the direct cost of a settlement there are certain costs, such as hospital bills, witness fees and employees' salaries while they are acting as witnesses, etc., which are not specially delegated to any particular accident. They are just kept in total. Adding those to the cost of accidents gives you a cost in 1924 of $416,838.96 or a cost of $100.15 per accident. In 1926 for instance the total cost was $453,368.49 or a cost per accident of $103.65.

The next line is the grand total cost of accidents including department salaries which is the figure shown on the preceding sheet of this exhibit. In 1924 for instance the total cost of accidents were $523,618.82 or $125.81 per accident. In 1926 the amount is $560,477.15 or $128.14 per accident.

I think in view of the fact that in the first place all costs of accidents are gradually increasing, apparently so from these exhibits there is a certain additional allowance which must be made for accidents, but I think taking into consideration the fact that the cost per accident in 1926 decreased somewhat, and the fact that the figures in Sheet No. 1 of this exhibit for 1926 are based somewhat on an estimate, I think that if we struck a line at about $75,000 additional accident reserve allowance it would be giving a mighty fair figure.

(Commissioner Harper) What percentage would that make of operating revenue? Would it be as much as 4%?

(The Witness) No, it wouldn't be 4%. It would be about 3¾.

(The Chairman) It would be more than 3½?

(The Witness) It would be a little more than 3½.

Q. Mr. Nodder, have you prepared an exhibit entitled "Property Appraisal Costs during the Period January 1, 1913, to September 30, 1927"? A. Yes, sir.

(Mr. Tingley) I ask that be introduced in evidence and marked People's Counsel Exhibit No. 44.

NOTE: Statement above referred to is here filed in evidence and marked "People's Counsel Exhibit No. 44."

Q. Will you explain that exhibit, Mr. Nodder? A. This exhibit sets out the cost of property appraisal from the beginning of the valuation proceedings in 1913 to September 30, 1927.

Q. What is the total amount? A. The grand total cost of that valuation has amounted to some $457,000 approximately. The statement is divided into two parts, the upper part being for the valuation which was undertaken as of January 1, 1914. It was never completed by the Commission at that date. The expenses of this former valuation ran up to August, 1919, and were entirely amortized through charges to expenses by the end of 1920.

Q. What's the total figure there? A. The total figure there was $128,614.07. The second part of this statement deals with the current valuation decided by the Commission in 1926 and begins with the formation of the valuation department in August, 1921. It will be noted that this latter part of the exhibit has been divided into two parts beginning with August, 1921, to May 31, 1924, and then from June 1, 1924, to date. There are two reasons for this latter division. The first is the fact that during the years 1921, 1922 and 1923 the charges made for valuation expenses were written off currently. In other words, as they occurred they were charged off to valuation expenses, operating expenses. This feature is also evident in the first five months of 1924 with the slight exception that at that date $37.27 too much had been written off. It was at this time that active work began on the valuation which was recently decided by the Commissison, and from that time charges were made tc the suspense account and have been amortized at the rate of $2,000 per month or $24,000 per year. At the present time the expenses of the Valuation Department, current expenses, salaries, etc., approximate $1,100 per month, so that there is being written out of the expenses of valuation already included approximately $900 per month or $10,800 per year in addition to charges for the Valuation Department proper.

Now Sheets 2, 3 and 4 of this exhibit are detailed expenditures of the amounts charged against the suspense account from June 1, 1924, to September 30, 1927, which

is the latter part of the first sheet. Sheet No. 2 is from June 1, 1924, to December 31, 1924. Sheet 3 are expenditures from the year 1925, and Sheet No. 4 separately for 1926 and the nine months of 1927.

In 1924 for instance the total expenditures, by that I mean from June 1, 1924, to December 31 as shown by Sheet No. 2, the total expenditures were $85,284.09. In 1925 these expenditures amounted to $147,821.27. In 1926 they amounted to $26,147.26, and in 1927 for nine months to $14,606.95. At the rate of $1,100 per month now being charged to valuation department expenses at the end of this year they will have amounted in total to $453,000.

This exhibit has been submitted so the Commission may decide a proper amount to be allowed to the Company as a deduction from operating expenses. It is recommended that the charges in the first half of this statement, that is from 1913 to 1920, be allowed as a proper expenditure of the years in which they were actually written off. In other words, consider those as items over the dam. And the same things I would suggest for the years 1920 to 1924. But inasmuch as they were practically written off to May 31, 1924, that they be considered as gone.

Beginning with the period June 1, 1924, I would recommend that, the amount by the way will have amounted to $325,000 at the end of the month of this last period June 1, 1924, to December 31, 1927, and I would suggest that they be divided equally, half to be borne by the car rider through charges to operating expenses, and the other half being borne by the stockholders by charges to profit and loss. This will result in approximately $162,500 being borne by the car rider. If amortization accruals at the rate of $2,000 per month be continued during the remaining month of this year the total amount amortized will then be $132,524.39, leaving a balance of approximately $30,000 to be amortized. It is suggested that this amount be spread over the following five years which will give a monthly accrual of $500 per month. This amount added to the current cost of maintaining the valuation department which I have already stated

to be approximately $1,100 a month will give $1,600 a month charge or $19,200 per annum in place of the present $24,000 per annum, and of course I suppose it is to be expected that with the completion of the valuation the valuation department expenses will shortly cease.

(Mr. Clark) Do you know whether that is so or not?

(The Witness) I do not.

(Commissioner Harper) What are the duties of the valuation department now that the valuation has been completed?

(The Witness) The recent duties in part have been computation of information for the preparation of this case, for instance, to bring the valuation to date in this case.

(Mr. Clark) Isn't that done in the regular reports to the Commission every month or every quarter?

(The Witness) No reports are made of that particular nature that I know of.

(Mr. Clark) They report all retirements and all net additions to capital, don't they?

(The Witness) They send in an annual report.

(Mr. Clark) Don't they include that in their monthly report?

(The Witness) No, sir.

(Mr. Clark) Quarterly reports either?

(The Witness) No, sir. Operations only.

(Mr. Clark) Is that the only purpose that you think would justify the continuation of the valuation department?

(The Witness) That's all that I can think of, the continuing of the valuation and keeping it up to date.

Q. Mr. Nodder, have you prepared an exhibit entitled "Estimated Revenue Lost Through the Issuance of Free Tickets to Employees and Park Concessionaires During 1926"? A. Yes, sir.

(Mr. Tingley) I ask that be introduced in evidence and marked People's Counsel Exhibit No. 45.

NOTE: Statement above referred to is here filed in evidence and marked "People's Counsel Exhibit No. 45."

Q. Will you explain that exhibit to the Commission? A. This statement is an estimate of the revenue lost to the United through the issuance to its employees and to Park Concessionaires and their employees of free tickets. It's a revision of the exhibit I put in in the original hearing in this case. The figures are based on the tickets issued during 1926, but it is estimated that approximately——

(Mr. Markell) What was the number of your old exhibit on the same subject?

(The Witness) No. 15. (Continuing) The same results will be shown for any succeeding year. The statement is based upon the tickets actually issued during that year which amounted to $5,674,893 as shown by the third column of figures. No records were available to show the number of tickets actually used in the various classifications shown on this statement. We do know however that the total number of free tickets used in transportation amounted to 4,876,952, and by taking the proportion that the one bears to the other, which is in this case 85.94%, and applying that proportion to the total number of tickets in the individual items we arrive at the amount shown under the column "Revision on Account of Unused Tickets." For instance 85.94% of the first item, 645,100 gives you the figure of $554,399. This column has been multiplied by 7½c on the theory that the employees or the park concessionaires would purchase tokens, and this gives a total figure of $294,320.40. Carrying out the first item as an example, 554,399 tickets taken from coupon pass books amounted to $41,579.93. The total of the items in the last column gives the figure I have just stated.

The next line I have allowed for transfer privileges, $122,427.39. This has been done because transfers are not allowed on the free tickets, and I have used the same percentage in this study that has been experienced in

1926 of ordinary revenue passengers. In other words, transfer passengers represented 41.6% of the total revenue passengers, so that by applying the same 41.6% to my figure of $294,320.40 gives me $122,427.39. After deducting this figure from the total allowance gives an estimated annual loss of $171,883.11.

Q. That was the figure used by Mr. Wolf in his study on the effect of the 1c transfer charge? A. That is correct.

Q. Any further comment on that exhibit Mr. Nodder? A. I have this comment to make, that if any change is made in the present rate of fare by so much will this amount of $171,000 be increased, the proportion that that increased fare bears to the 7½ cent token fare used in this exhibit, so that figure would be greater if any change in the revenue should result.

Q. Mr. Nodder have you prepared an exhibit entitled "Additions to and Retirements from Valuation"? A. Yes, sir.

(Mr. Tingley) I ask that be introduced in evidence and marked People's Counsel Exhibit No. 46.

NOTE: Statement above referred to is here filed in evidence and marked People's Counsel Exhibit No. 46.

(Mr. Markell) Have you another copy?

(Mr. Tingley) We haven't any more copies.

(The Chairman) This was the one that we decided we wouldn't go to the expense of having this whole thing photostated. It looks very much more formidable than it is. I think after Mr. Nodder explains it you will find that you won't need so many copies.

Q. Will you explain that to the Commission, Mr. Nodder? A. The exhibit is entitled "Valuation as of December 31, 1923, with Additions Thereto and Retirements Therefrom by Years, During the Period January 1, 1924, to August 31, 1927." This exhibit has been prepared to bring the Commission's valuation as of December 31, 1923, up to date, and it might be well to state that in this exhibit no amount has been included on ac-

count of easements on the basis that the Commission has not yet made any decision on it, and any amount that the Commission does accept may in lump total be added to this figure.

The first sheet is a grand summary of the entire thirty-three sheets, beginning with the valuation of $70,000,000 made by the Commission and shows additions thereto and retirements therefrom for each of the years 1924, 1925, 1926 and the eight months to August 31st, 1927. The first item on the sheet is the Commission's valuation of $70,000,000 as of January 1, 1924, and there has been deducted from this an amount for grants in aid of construction which was the ledger balance in that account as of December 31, 1923.

Q. What was the amount of that, Mr. Nodder? A. The amount of that was $90,259.45.

Q. What did that consist of? A. Consisted of grants which had been given principally by the City of Baltimore in assistance in building construction, etc.

This left a net valuation as of January 1, 1924, of $69,-909,740.55, and that's the starting point of the exhibit.

To this amount has been added additions to fixed capital consisting of three items, first opposite the line "Additions to Fixed Capital" the regular increase in fixed capital, second the item "Articulating and Permanently Coupling Cars" which is at present carried in suspense, and third "Improvements Made on Property Leased by the United From the Maryland Electric Railways Company." The first of these items, which is shown on the exhibit to be $1,445,705.52, should be explained a little further. The total additions to fixed capital of $1,582,-265.38 which is shown in the short column is brought from sheet No. 2 and that I will explain a little later.

(Mr. Clark) Now are they the net additions?

(The Witness) That's total additions for the year 1924.

(Mr. Clark) All right.

(The Witness) From this amount has been deducted

the cost of removal of retired property, $136,559.86. The asterisk referring to the note at the bottom of the page states that this represents 20 per cent. of the cost of track reconstruction and renewal.

Now in connection with the depreciation exhibit I explained that when the Company was making reconstruction or renewal of tracks and overheads the practice was to charge the entire cost of the job to the depreciation accounts and compute therefrom an amount which would represent the original cost of the work retired. This computation is based on the factor of increase in cost of labor and material occurring between the time that the original work was done and the present time, or when a renewal or reconstruction is made. Now the total of that job included both the tearing out of the old tracks, special work, etc., prior to the putting in of the new work, so that there is a certain cost which is not a charge to fixed capital on a new job. In other words, the amount shown in this exhibit, and it is the amount that is shown on the company's books for additions amounting to $1,582,265.38 includes a certain amount for labor expended in tearing out old structures, trackage or special work as the case may be. It is impracticable, if not impossible, to ascertain the exact cost of such work when the tearing out and the building up are done at the same time. To arrive at this figure therefore a study of a number of representative jobs was made, and this study disclosed that the total cost of labor in those jobs aggregated approximately 44% of the total cost of the job. In consultation with the Commission's engineering staff, and I think it is self-evident that such is the fact, it has been determined that approximately 50% of that labor represented costs applicable to the tearing out of the old work and that 50% represented new construction. In other words, fifty-fifty on the tearing out and putting back.

Now I already stated that the labor costs of that study aggregated something like 44% of the total cost of the work. Applying the 50% labor to the 44% will give 22% of the total cost of the work as the cost of tearing down the old work. For the purposes of this exhibit I have just used a straight 20 per cent., and this 20%

has been applied to the amount of track reconstruction work which is shown on sheet No. 8 for 1924 and which amounted in 1924 to $682,799.31. Twenty per cent. of that gives the amount of $136,559.86 for the year 1924 shown in the short column under 1924 of this first sheet.

The item of Improvements to Leased Property of the Maryland Electric Railways Company shown under the additions amounting to $29,491.81 is shown in detail on sheet No. 32 of the exhibit.

That's the next to the last one. It is shown there by years for the years 1924 and 1925 and on sheet No. 33 for 1926 and the eight months of 1927.

Adding these three items together gives the amount that is shown for total additions of $1,500,868.60. Now from this figure there have been deducted retirements at valuation prices. This figure in 1924 amounted to $828,376 and has been brought forward from sheet No. 2 where it will be explained shortly. The next line which includes grants in aid of construction is blank for 1924, 1925 and 1926, but there is an amount shown for 1927 of $28,211.65. That amount covered the proportionate cost of the City of Baltimore in connection with the removal, as I recall it, of the Edmondson Avenue tracks. That was the proportion that the City bore to the cost of that work. The next line is Total Deductions which in 1924, 1925 and 1926 amount to the same as the retirements. In 1927 that amounted to $1,288,011.65. The difference between the Total Additions and the Total Deductions gives a net increase for the year which in 1924 was $672,492.60. In 1925 this amounted to $292,854.25. In 1926 it was a decrease of $230,751.52, and in 1927 a decrease of $560,120.64. Now this net increase for the year has been added to the amount shown in the third line down, Valuation at Beginning of Year to make a total at the end of the year, and the two then have been averaged to give an average for the year which is the last line on the statement. 1924 this average for instance was $70,245,986.85. The similar figures have been shown for 1925 and 1926 and 1927 as I have explained for 1924. I don't think any further explanations of those is necessary if I just deal with 1924.

It might be well to draw the Commission's attention to the last item in the last column of the sheet in which it is shown that the total at August 31, 1927, the end of the period covered by this exhibit, amounted to $70,084,215.24. That is without easements.

(Mr. Toole) In getting that, in that have you considered the depreciation?

(The Witness) I have not.

(Mr. Toole) The general depreciation?

(The Witness) I have not considered any depreciation in this exhibit.

(Mr. Toole) When do you do that? What I mean is what I have said once before, maybe I don't know what I am talking about, but if so I want to find that out so it won't happen again. If you take an automobile to New York or to Boston and come back again you break a wheel, you replace that broken wheel. Now that automobile isn't worth as much as it was before, is that right?

(The Witness) That's correct.

(Mr. Toole) Now if you run one of these railway cars over track and nothing is replaced is the value of that railway car and that track and that trolley wire, is that worth what it was before?

(The Witness) That's perhaps a question, as far as the value is concerned, that I am not capable of answering, but I will answer it this way. I have heard a good many arguments before commissions from railways, particularly steam railroads, that no depreciation existed in a property; that a property that is kept in 100% operating condition is 100% good. Now with this property right here, as I say, I am not qualified to state from a typical standpoint whether any depreciation has actually occurred, but while the property since December 31, 1923, has depreciated it is also a fact that a certain amount of that property has been replaced with new stuff, so that on the average it might be that the property is now as valuable as it was on December 31, 1923.

(Mr. Toole) But why would a different rule apply to a railway car than to an automobile? Don't the automobile tax lower as years go by?

(The Witness) Absolutely, but if you have three automobiles, one is one year old, one is two years old, and one is three years old, and you take the average depreciation of those three automobiles, and at the end of the third year this one is scrapped and a new one comes in then your average will perhaps be the same that you had at the beginning of the three years. Now if you only had one automobile then your statement would be correct.

(Mr. Toole) Yes, but we don't see anything here where these things have been replaced. There is no evidence of that. The cars are used, the tracks are used, the trolley wires are used. Now if you are going to count it as 100% today, tomorrow it breaks.

(The Witness) There are something like 20 miles or so of track each years which is renewed, absolutely rebuilt.

(Mr. Toole) Let me put it another way and then I won't worry you any more. Suppose now when the Commission made that first valuation in 1923 they took into consideration the value or rather the length of time all of this stuff had been used, didn't they?

(The Witness) I believe so. In some of the exhibits it is spoken of as average ages.

(Mr. Toole) If it's been in use fifteen years it wouldn't be worth as much as if it had been used one year, and the valuation was made accordingly, isn't that true?

(The Witness) That's correct.

(Mr. Toole) Suppose a valuation would be made now, on the first of January, 1928, wouldn't that same rule be applied?

(The Witness) Absolutely.

(Mr. Toole) If that wasn't done wouldn't the Commission then find that a whole lot of the property isn't worth as much as it is in 1923?

(The Witness) That's a fact.

(Mr. Toole) Then the valuation of the plant really decreases year by year?

(The Witness) The valuation of the plant that is put in at a certain time does decrease, but there is a certain amount, as I say I am not qualified from a physical to say just what that is, there is a certain amount that is covered on the average by the addition of new plant, so that the average is perhaps the same. Now as I say I am not qualified to state whether it is.

(Mr. Toole) Well, I don't see why the same rule wouldn't apply if you take an automobile even if you owned a thousand automobiles, if you keep breaking the wheels.

(Mr. Tingley) But you are buying new ones all the time.

(Mr. Toole) But they don't always buy new cars, and when they do that's added to capital. The reason I asked you about this a lady said, whom I met back in the rear end of the hall, that this was a thing that ought to be pushed to the limit, and that I was very clever in pushing this, and if I am getting any roses throwed at me like that I want to get them all, and I want to find out just what's what. The ladies think that that ought to be taken notice of and the value of the plant be reduced accordingly.

(The Witness) I don't know. I suggest that the ladies make quite a study of that and I think they will be allowed to come up here and testify to the value of that property right now as compared to what it was in 1923.

(Mr. Clark) If you take the undepreciated value which the Commission put on this property as of December 31, 1923, in order to bring that valuation up to date at any time, now, next year, or 1930 or 1935, wouldn't you take the undepreciated value which the Commission found December 31, 1923, add net additions, then take that total undepreciated and apply the 85% condition to the whole in order to get the value as of the particular time on the theory that after so many cycles we assume that the condition of that property is always 85%?

(The Witness) If you were to assume that 85% were always the cycle.

(Mr. Clark) Isn't that always a fair assumption; that 85% condition is a normal condition for a normally maintained railway to be?

(The Witness) I wouldn't want to say that.

(Mr. Clark) Wasn't it contended that the United was well maintained in 1924?

(The Witness) Yes, sir, but there is a difference of five or six per cent. between the claim of the company for value of the property and the allowance by the Commission, the per cent. condition.

(Mr. Clark) Yes, there is a difference of opinion as to the condition, but isn't it so that when this Commission found that the condition of this here maintained electric railway property was 85% that that is the percentage which this Commission would apply to a well maintained electric railway now or 1930 or 1935?

(The Witness) I would say that that is correct provided that the Company did maintain its property in about the same condition that the Commission found then.

(Mr. Clark) I am assuming that and I am assuming that to be reasonable therefore to get the valuation as of today, 1927, wouldn't you first get the undepreciated value by taking the Commission's undepreciated value in 1923, putting the net additions to get the undepreciated value today, and then apply the 85% condition to get it today?

(The Witness) It would perhaps be a good principle.

Q. Now suppose you complete your comment on this exhibit, Mr. Nodder? A. Now sheets 2 to 11 of this exhibit are detailed statements for the year 1924. I am not going to say anything about them except as to sheet 2 which is a summary of those sheets 2 to 11. The balance of the sheets follow in similar groups. Sheets 12 to 18 cover 1925. Sheets 19 to 24 cover the year 1926, and sheets 25 to 31 cover the eight months of 1927, and

each of these groups of sheets is preceded by a summary which in the case of 1924 is sheet No. 2, 1925 is sheet No. 12 and so on. Those summaries are identical in form so that if I explain 1924 I think the same explanation will be sufficient for all of the other years without going into any further detail.

Now this statement is divided into two sections, first additions and secondly retirements. The first column is book figures and has been put in there so as to tie up these statements with the balance sheets which I will speak of later.

The next column "In Valuation" represents items that have been added to the books during the year 1924 which were included in the Commission's valuation, or in the case of those Maryland Electric cars they have just been transferred from one company to the other without any net addition in fixed capital, and the last column shows "Not in Valuation," that column shows net additions during the year, and that is the figure $1,582,265.38 which has been carried forward on the first sheet of the exhibit.

Now under Retirements I have already explained the book figures, the column "Valuation Figures" represents the retirements at valuation prices. This figure, there is an historical note attached to it, is made up in the following way. On sheet No. 11 of this exhibit you will find a statement of retirements of fixed capital at depreciated valuation amounts for the years 1924, 1925 and 1926. This sheet is shown by accounts. Under 1924 you will find the first part of that 1924 retirements as shown in Company's Exhibit No. 23. That's the figure that Mr. Bancroft Hill put in as retirements during 1924. The total of that column amounted to $802,771.00. Against this has been applied the per cent. condition allowed in the Commission's valuation. In the case of tracks for instance 80%, 80% has been applied to Mr. Hill's figure to arrive at a depreciated value of $448,880. That depreciated value is the amount at which that particular group of tracks retired were included in the valuation in the $70,000,000 figure. The same thing for paving. The amount shown by Mr. Hill is $158,000. Ap-

plying a per cent. condition of 80 gives a depreciated value of $126,400.

The same thing applies to all the other accounts so that the total for the year, depreciated value, amounts to $649,358. On sheet No. 2 this figure has been brought forward and to it has been added the overheads in the valuation, which amounted to 22.3 per cent. of the cost to reproduce new. This amounted to $179,018, making total retirements depreciated with overheads of $828,376. These overheads have been taken out for the simple reason that they are included in the $70,000,000 in the first place, and secondly additions have been made in this exhibit including the overheads as actually now charged by the Company. No deduction has been made from the present additions for overheads which are currently being charged.

(Mr. Clark) What do you mean by overheads currently being charged?

(The Witness) As the Company makes fixed capital additions it charges a certain percentage to cover superintendence, engineering, general overheads, etc., into fixed capital.

(Mr. Clark) That's supposed to represent actual expenditures?

(The Witness) It represents actual expenditures.

(Mr. Clark) Then they are construction overheads you are speaking of?

(The Witness) They are construction overheads. Now sheets Nos. 3 to 10 are details upon which sheet No. 2 has been built. For instance the first item of sheet No. 2, Engineering Department, is shown in detail on sheets 3 and 4 amounting to $82,861.92. The next item of Franchise Charges $8,028 is shown on sheet No. 5. The next item of Paving Charges $4,054.11 and so on down the line, track reconstruction is shown on sheet No. 8 amounting in this case to $682,799.31. These items have all been explained in sheets 3 to 11.

The following years 1925 and 1926 as I said before are made up exactly the same way that 1924 is made up.

The summaries for those years are shown on pages 12, 19 and 25, the latter for the year 1927.

In the preparation of this exhibit no attempt has been made to adjust the valuation as of December 31, 1923, to take into consideration any decreased costs of street railway construction since 1923 nor any depreciation occurring in the property since the valuation date. I think Mr. Wolf has already spoken very effectively on the first of these items, the matter of reduction in street railway construction. No consideration has either been given to mileage which has been abandoned due to the rerouting program but which has not yet been written out of the Company's books. In other words these figures as far as additions are concerned are based purely on book figures, and as far as retirements are concerned are based on Mr. Bancroft Hill's statements which did not include abandoned trackage which had not actually been taken up. That's my understanding of it.

(Mr. Clark) I would like to make a statement that I should have made this morning and for which I apologize. Mr. Sobeloff asked me this morning if I wouldn't explain to the Commission that he was actively engaged in a civil case and he would be unable to attend.

(Examination suspended.)

NOTE: At 4:00 o'clock P. M. the Commission then adjourned until Tuesday, November 22nd, 1927, at 10:00 o'clock A. M.

TWELFTH DAY.

Thereupon—

CHARLES NODDER,

a witness of lawful age, produced on behalf of the Public Service Commission, having heretofore been duly sworn, according to law, and whose examination was suspended for the purpose of adjournment, resumed the stand, was examined and testified as follows:

DIRECT EXAMINATION (Continued).

By Mr. Tingley:

Q. Mr. Nodder, have you prepared an exhibit entitled "Net Return average rate base and percentage of rate of return for the years 1924 to 1926, inclusive"? A. Yes, sir.

(Mr. Tingley) I ask that be introduced in evidence and be marked People's Counsel Exhibit No. 47.

NOTE: Statement above referred to is here filed in evidence and marked People's Counsel Exhibit No. 47.

Q. Will you explain that exhibit to the Commission, Mr. Nodder? A. This exhibit shows the net return on its investment received by the United during the years 1924 to 1925 and 1926.

(The Chairman) You mean on its value?

(The Witness) On its investment. That is its valuation. The first line of the statement is the amount shown in Company's Exhibit No. 16 and to this has been added two items which were deducted erroneously, on that company's exhibit.

The first item, interest on Bethlehem Steel Company's construction, is the amount paid by the Company for the use of the tracks at Sparrows Point, owned by the Bethlehem Steel Company. The amount is charged thru our account No. 217, miscellaneous rents, as provided by the Commission's classification and as such is not consid-

ered a proper deduction in computing the amount of income included in the so-called return.

The second item represents commissions paid to fiscal agents for their services in paying those coupons. This amount is chargeable according to the Commission's classification to account No. 225, miscellaneous debits. And that is another account that is not considered a proper deduction in arriving at the return.

From this exhibit it will be noticed that the corrected return received by the United during those three years amounted to $4,136,578.38 in 1924; $4,291,051.39 in 1925; and $4,326,183.91 in 1926.

There is shown on the next line the average rate base without easements as shown on Exhibit No. 46, the large one which I explained yesterday afternoon.

The next line shows the rate of return on that base, that is without easements for the three years, which amounted in 1924 to 5.89; 1925 to 6.07, and in 1926 to 6.11. The rate of the return on a total valuation of 75 million dollars, which basis was explained by Mr. Wolf yesterday amounted in those years to 5.52 in 1924; 5.72 in 1925, and 5.77 in 1926.

Q. Have you prepared an exhibit entitled "Investment in Road and Equipment by Accounts"? A. Yes, sir.

(Mr. Tingley) I ask that be introduced in evidence and marked People's Counsel Ex. No. 48.

NOTE: Statement above referred to is here filed in evidence and marked People's Counsel Ex. No. 48.

Q. Will you explain that to the Commission, Mr. Nodder? A. This exhibit has been prepared purely as an accounting exhibit to show the Commission the condition of the Company's fixed capital as shown by its books as of August 31, 1927.

The statement has been built up by accounts since June 30, 1914. The investments as of June 30, 1914, is given in one item, the first item on the sheet, it being impracticable to separate this amount by accounts on account of the consolidation of 1899 when all of its accounts

were put together in one lump sum without any respect to the particular accounts, also to the fact that prior to Commission classification there was no set form of keeping fixed capital by accounts.

The exhibit therefore by accounts has started with December 31, 1923. That is, the investment as of December 31, 1923, by accounts, and since that date additions have been made for the two companies, United Railways and Electric Company and Maryland Electric Railways Company for 1924, 1925, 1926, and the amount for the eight months ended August 31st, 1927.

In the last column are shown the details for the investment by the two companies to August 31, 1927.

It will be noted that the grand total investment in road and equipment, shown by the Company's books on August 31, 1927, is the figure in the bottom right hand corner, $90,575,521.66.

Q. Mr. Nodder, just to make that exhibit clear, that last total figure which you read is higher than the amount of the valuation brought up to date, isn't it? A. Very much so.

Q. And is very much higher than the amount of the valuation at the time of the valuation? A. Yes, sir.

Q. Have you prepared an exhibit entitled "Average rate of interest on indebtedness at September 30, 1927"? A. Yes, sir.

(Mr. Tingley) I ask that be introduced in evidence and marked People's Counsel Ex. No. 49.

NOTE: Statement above referred to is here filed in evidence and marked People's Counsel Ex. No. 49.

Q. Will you comment on that exhibit, Mr. Nodder? A. This next series of three exhibits is intended to show that a six per cent. rate of return is ample for this Company in view of the rate it is now paying on its borrowed money.

This statement, Exhibit No. 49, shows the indebtedness of the United and of Maryland Electric Railways Company as of Sept. 30, 1927, and covers both bonds,

mortgages and short term notes, the latter amounting to $1,900,000 at interest rates ranging from four and a half to five per cent. and averaging four and three-quarter per cent. as is shown on my next exhibit that I will speak of in a moment.

The first column of this exhibit shows the par amount of the securities or notes actually outstanding at September 30. The next column the interest rate and the last column the actual interest on the particular securities for one year. From this it will be noted that the average interest rate being paid is 4.6783%, slightly less than four and three-quarter per cent.

The attention of the Commission is directed to the fact that the total indebtedness as shown by the exhibit as of September 30th, was $69,076,200, or slightly less than the Commission's valuation plus additions and retirements as shown by People's Counsel Ex. No. 46.

To allow an eight per cent. return on this valuation would be equivalent to practically allowing a three and half per cent. profit. That is the difference between 4.678 and 8% on the entire property, in which the stock has an equity of about a million dollars plus the Commission's allowance for easements that may be decided later. On the one million dollars this would amount to a two hundred and forty-five per cent. earning, and with a five million dollar valuation of easements would amount to over forty per cent. of earnings.

(Mr. Clark) So that notwithstanding the fact, Mr. Nodder, that exclusive of easements, according to the Commission's valuation a valuation of only about one million dollars is given to the 20 million of common stock and the Cmpany has paid three quarter dividends this year, hasn't it?

(The Witness) That's right.

(Mr. Clark) And notwithstanding a reported deficit?

(The Witness) Not a deficit, the Company has reported no deficit.

(Mr. Clark) A deficit under dividend requirements?

(The Witness) A deficit under dividend requirements, yes, sir.

Q. Mr. Nodder, have you prepared an exhibit entitled "Statement of notes outstanding September 30, 1927"? A. I have.

(Mr. Tingley) I ask that be introduced in evidence and marked People's Counsel Ex. No. 50.

NOTE: Statement above referred to is here filed in evidence and marked People's Counsel Ex. No. 50.

Q. Will you explain that exhibit to the Commission, Mr. Nodder? A. This statement is in support of the previous statement I just put in and shows the short term notes outstanding at September 30, 1927. It shows to whom payable, the due dates, and the rates of interest and the amount of principal. I have already stated that the rates of interest, shown in this statement, range from four and a half to five per cent. with a weighted average of four and three-quarter per cent., on the total amount outstanding of $1,900,000.

It might be of interest to the Commission to know that during July when it is claimed that passenger revenues were falling so rapidly to the impairment of the Company's credit as stated very definitely in the Company's brief, the Company was still able to borrow at the rate of four and a half per cent. as against four and three-quarter per cent. in the previous years.

Q. Have you prepared an exhibit entitled "Average weighted interest rate of securities authorized to be issued by the Public Service Commission of Maryland from January 1, 1921, to December 31st, 1926"? A. Yes, sir.

(Mr. Tingley) I ask that be introduced in evidence and marked People's Counsel Exhibit No. 51.

NOTE: Statement above referred to is here filed in evidence and marked People's Counsel Exhibit No. 51.

Q. Will you comment on that exhibit, Mr. Nodder? A. This exhibit is a weighted average of the interest rates on securities which have been authorized by this Com-

mission since January 1, 1921, to December 31, 1926. It takes in all the companies that have been authorized to issue securities by this Commission.

(Mr. Clark) By securities, you don't include stock, do you?

(The Witness) No, because it is more or less impracticable to get the rate of earnings on stocks.

The significance of the exhibit is the fact that the average interest rate of the securities issued by Maryland Public Utilities has shown a decided tho gradual decrease from 6.33% to 5.12% in 1926, and makes it evident that utilities at the present time are able to borrow money at considerably less rates of interest than was possible in prior years.

Q. The immediate years prior to 1921, the immediate post-war years, showed materially higher rates, didn't they, Mr. Nodder? A. For the companies I examined, yes.

Q. And there has been a steady decline from 1921 to 1926 in the average interest rates on the securities authorized by the Commission? A. Yes, sir.

(The Chairman) That's for all the companies?

(The Witness) Yes, sir.

(Mr. Howard) Is that the rate on par?

(The Witness) That's the interest rate on par. I might say in preparing this study here I didn't take into consideration the rate at which they sold for the simple reason it was very hard to get all these selling prices. I did notice in general around the early periods of this exhibit, the Commission was allowing securities to be sold at 85 and 90, whereas now there are very few securities going out that the Commission allows to be sold at less than 95. Practically all of them are par; some of them around 97½.

Q. So that had the market figure been used instead of the face figure, the result of the exhibit would have been still more striking, and would have been the same in effect? A. Yes, sir, had the same effect and been more

striking in the reduction of the interest rates now being paid.

Q. Mr. Nodder, have you prepared some balance sheets of the Company? A. Yes, sir.

(Mr. Tingley) I ask that they be introduced in evidence and marked People's Counsel Exhibit No. 52.

NOTE: Balance sheets above referred to are here filed in evidence and marked People's Counsel Exhibit No. 52.

Q. Will you make any comment that you want on this exhibit, Mr. Nodder? A. This exhibit consisting of four sheets, is the regular accounting exhibit consisting of the balance sheets of the Company for the years 1923, 1924, 1925, 1926 and to August 31, 1927.

Sheet No. 1 is a consolidated balance sheet of the Maryland Electric and United Railways Company and several subsidiary companies that I will speak of in just a moment.

Sheet No. 2 is a balance sheet for the same periods as the first one for the United Railways Company alone.

Sheet No. 3 is comparative balance sheets for the Maryland Electric Railways Company covering the same periods.

Sheet No. 4 is a supported statement to Sheet No. 3 and is occasioned by the fact that the Baltimore, Sparrows Point and Chesapeake Railway Company and the Baltimore, Halethorpe and Elkridge Railway Company, which is spoken of on Sheet No. 4, are not consolidated with the Maryland Electric until sometime in 1924, so to make a comparative statement I have consolidated those three companies, the Maryland Electric, the Baltimore and Sparrows Point and Baltimore and Halethorpe, to make one consolidated total as of December 1, 1926.

As I say, during 1924 they were consolidated, so that the balance of these figures covers all of the companies.

(The Chairman) On this small sheet?

(The Witness) Yes, sir, on this small Sheet No. 4.

(Mr. Tingley) Mr. Nodder is with you for cross-examination, Mr. Howard.

(Mr. Howard) We better follow in order and have cross-examination of Mr. Wolf first.

(Mr. Clark) What's the name of that consolidated company?

(The Witness) Maryland Electric Railways Company.

(Mr. Clark) They were just merged into that company?

(The Witness) They were just merged into the Maryland Electric Railways Company.

(Examination suspended.)

Thereupon—

H. CARL WOLF,

a witness produced on behalf of the Public Service Commission of Maryland, having heretofore been duly sworn, according to law, and whose examination was suspended for the purpose of hearing another witness, resumed the stand, was examined and testified as follows:

CROSS-EXAMINATION (Continued).

By Mr. Howard:

Q. Mr. Wolf, at the beginning of your testimony yesterday, you defined the terms you were going to use, and one of those terms that you defined was the definition of when a rate was burdensome and I understood you to define it that you were going to use that term to mean whenever a rate caused any diminution in travel, then under your definition you called it burdensome. I just want to get the meaning of the terms clear? A. That was one of the tests of burdensome, yes.

Q. I understood you to define burdensomeness in the sense you were going to use it as meaning, as you said, whenever a rate was such as to cause a reduction in the passengers that then it was burdensome? A. It indicated burdensomeness, that's right.

Q. So according to your definition if passengers were permitted to travel free, and then a one cent fare was introduced that undoubtedly cause a diminution in the travel, wouldn't it? A. I would think so.

Q. And that would be within your definition of a burdensome fare? A. It would become burdensome to those people who refused to ride.

Q. I only want to get the meaning of the term, of course? A. That's right.

Q. Now you have your exhibits, Mr. Wolf? A. Yes, sir.

Q. The first exhibit that you filed was one undertaking to show by illustrations the effect of fare variations on revenue passengers and for that purpose you have some ten companies selected? A. That's right. Those are the companies selected by the American Electric Railway Association's statistical department.

(The Chairman) That's Exhibit No. 19?

(The Witness) Yes.

Q. You took them from that bulletin? A. Yes.

Q. Now wasn't that period in general one of rising fares? A. There were both increases and decreases in this table.

Q. When you count them haven't you got only 8 decreases as against a very much larger incerase there? A. I think so, yes, there were more increases than decreases.

Q. And everyone knows that's been a period in which as a whole there has been increases rather than decreases, isn't that true? A. This covered the war period. Yes, that's true. In those towns there were more increases than decreases.

Q. And hasn't it also been on the whole a period in which the travellers on street railways have not been increasing as before, but rather falling off? A. No, I thing that isn't true. It's been going both ways on these properties.

Q. Now let's see some of the illustrations that you have here. Take for instance the Twin City Rapid Transit Company. They had a fare of six cents and they introduced an eight cent base with ten tokens for 60 cents. The token rate is the same as before, isn't it? A. That's right.

Q. Do you think that a falling off of over 10 per cent. in passengers could have had any connection with changing from a flat rate of six cents to a token rate of six cents? A. Oh, I think it had some connection, yes.

Q. But you don't believe for a moment that it could have caused a falling off like that, could you? A. I am not prepared to say one way or the other.

Q. And you are not prepared to say that it didn't? A. Not one way or the other.

Q. Now turn to the Dallas Railway and Terminal Company. There you have a falling off of 4.6%, as the last item in this part. That was a change from a six cent flat fare to five tokens for 30 cents. Five tokens for 30 cents is at the six cent rate, isn't it? A. That's right, but the cash fare was increased to seven cents, and in those cities I think the increase in the cash fare with a retention of the same token fare would undoubtedly have an effect on the average fare paid and hence on the riding.

Q. Take up the next one, and the Androscoggin and Kennebeck. By the way, is that an interurban road? A. Yes, with town operation. I am not sure that this includes the whole operation or just the town operation. It does run between cities or towns.

Q. Now when you see, as the last item thereon shows, going from a nine cent base with six tokens for fifty cents, to ten cents a drop of nearly 20%, you are not prepared to say that that was the result of that increase from a nine cent base and a token allowance to ten cents, are you? A. No, but on the other hand, I am not prepared to say that it isn't. I think the increase to the ten cent fare undoubtedly played a very important part in that large drop.

Q. Let's take the next one, the Birmingham Light and Power Company. They had a flat fare of seven cents, didn't they? A. At one time, yes.

Q. And they changed that to an eight cent base, with 15 tokens one dollar? A. That's right.

Q. Fifteen tokens for one dollar made it less than a seven cent rate? A. Less.

Q. So there was a change from a seven cent cash fare to an eight cent one, accompanied with a token rate that was cheaper than the seven cent rate? A. That's right, but the average fare was still increased.

Q. It must have been very slightly, wasn't it? A. I can't recall at this time.

Q. At any rate a man who chose to buy tokens rode cheaper? A. Well, the man who could afford to put a dollar into fifteen tokens, yes. Ordinarily I think you will find over the country that that's not so often done as is illustrated in these weekly passes, when they charge too high a price for them.

Q. Now the loss in passengers that you note there is nearly 25%? A. That's right.

Q. By the way, you say there was a raise in the average rate, do you know what the average rate under the two methods was? A. No, I can't give you that figure now, Mr. Howard.

Q. It must have been very insignificant, wasn't it, if at all? A. I can't give the figures.

Q. You think there was? A. I am sure there was an increase in the average fare.

Q. But the particular change was that anybody who bought tokens was riding cheaper than those who travelled before? A. Yes, anybody who wanted to spend a dollar.

Q. He could travel cheaper than he did before? A. Yes. I doubt if there were very many people did that. In fact, I think your Company at one time objected to that very thing, to putting a token rate on a dollar basis, or

something of that kind, on account of the fact that few people would take advantage of it except the wholesalers who could actually afford to put the money into it. In other words, the small rider didn't benefit by it.

Q. You mean to say that the traffic there fell off nearly 25% or one-fourth because of such a change as that? A. I say that the traffic fell off almost 25% when the fare change was made, and I think that the fare change had a very important bearing on the falling off in traffic.

Q. Such a falling off as 25% on such a fare change as that? A. Take the next point, Mr. Howard, where the fare was decreased materially from eight cents cash to seven cents cash, and from a token fare of six and two-thirds cents to a token fare of six cents and there was an increase of 28%.

Q. I wanted you to consider that second one a moment. I was going to come to that. There is a reduction of the flat rate by one cent, but if you bought 20 tokens it took more than a dollar, it took one dollar and 20 cents. You just said the people wouldn't do that. If they wouldn't spend a dollar, they wouldn't be more apt to spend one dollar and twenty cents, would they? A. No.

Q. There was a token rate of six cents as compared with a rate of seven cents on the previous one? A. That's right.

Q. And here is a jump in the riding of 28%. Have you just said you think that 28% was due to the change in the fare? A. I think it's very strongly evidenced that the 28% is in line with the 24.9% decrease when you look at the cash fare. When the cash fare increased from seven to eight cents, the riding fell off 25%, and when the cash fare again was decreased from eight cents to seven cents, the riding picked up about the same amount.

Q. And you really think that those figures of 24.9% and 28%, as large as they are, are largely due to those slight fare changes there? A. I think they are significant.

Q. Isn't Birmingham a highly industrial city? A. Yes.

Q. A city in which riding would be much affected by the fluctuations in business? A. It would be affected by fluctuations in business, yes, industrial business.

Q. Do you know anything about the jitney situation in Birmingham and whether or not these changes weren't due to jitney competition? A. No, I couldn't say as to that.

Q. As a matter of fact, don't you know they were entirely due to jitney competition, and not in any degree to the change in fare? A. I don't know that of my own knowledge and it would seem to me that a jitney situation couldn't have prevailed long to have affected both the up and down figures.

Q. I won't ask you any more, Mr. Wolf, about what you haven't looked up and haven't considered. Of course that is for us to prove, but I want to make clear again that you think that such enormous fluctuations as that could have been due to the relatively slight changes in fare that are shown in the preceding column? A. I think, as I said before, that the changes in fare have an important bearing on the change in riding.

Q. Important enough to make this a fair illustration as to the effect of the changes of fare? A. I am not prepared to say that any particular change in fare had a direct effect on the riding there when a slight increase in fare resulted in a large change in riding, or when a large change in fare resulted in a small change in riding, I don't think the two are directly comparable, but if you take the country as a whole, as portrayed in these ten cities, that it does give a pretty fair indication that riding decreases with increases in fare and that riding increases with decreases in fare.

Q. Let me see if I understand you. When you no longer are prepared to say that that Birmingham illustration is a fair one, you say merely that the table as a whole is? A. No, no. I say, and as I have said right long, that a certain change in fare cannot be taken to result directly in a certain percentage change in riding and I think that there are factors, as I said in my opening testimony, to be considered locally in all these cases,

but I do think that a change in fare from seven to eight cents and again from eight cents back to seven cents had an important bearing on the passengers carried by the Birmingham Railway, Light and Power Company.

Q. Undoubtedly those two Birmingham changes, if they are fair illustrations, are the most striking ones in the table, aren't they, in—— A. In percentages, yes.

Q. And you still think there is a direct connection between those two fare changes on the left and those results in the last column? A. I do, and I am only citing again figures as compiled by the American Electric Railway Association.

Q. I am not disputing the figures. A. I mean to say I am not standing alone in drawing that set as a comparison. That set was drawn first by the association's statisticians.

(Mr. Tingley) For what purpose, Mr. Wolf?

(Mr. Wolf) For the purpose of attempting to show the affect of changes in fares on riding.

Q. Now would you take up Exhibit No. 20 a moment, Mr. Wolf? A. Yes, sir.

Q. That is the exhibit which is intended to show the effect of fare changes on passengers on the Charles Street bus line, isn't it? A. That's right.

Q. Now I ask you how you selected your periods for comparison there yesterday and you said that you took the greatest number of overlapping months, isn't that right? A. That's right.

Q. Your study then, doesn't show what the immediate affect was, it only shows the whole period that followed for a number of months in the way you stated it, doesn't it? A. I thought that was the fairest way to get at it. I will be glad to set it up any other way that will be any fairer.

Q. Have you got the papers on which your exhibit was based before you? A. Yes.

Q. Now have you got the riders by months in your study? A. I have.

Q. When was the ten cent rate introduced? A. June, 1922.

Q. Now how did the next following month, July, compare with the preceeding one? A. July, 1922, was higher than July, 1921.

Q. How much was it higher? A. By 35 thousand, bringing the total of 1922 to 157,590.

Q. Of which 35 thousand was increase? A. That's right. At the same time, the rail passengers were increasing for the same period.

Q. But that was the month after the ten cent fare was introduced? A. That's right.

Q. How about the next month? A. The next month showed an increase of 4,500 passengers, bringing the total to 126,047.

Q. So the ten cent fare apparently wasn't working against the riding effort? A. Going down to November.

Q. What's your next month? A. September it again showed an increase of 13,600.

October showed an increase of 10,000.

November showed a falling off of 13,300. December showed a still larger falling off of 34,800.

Q. And what you have produced in your table is the average for what period of that? A. For the period ending June 30, 1923.

Q. You have taken the whole year up to June? A. That's right.

Q. Now looking at your figures there, do you still think that that falling off was due to increased fares? A. I think there is a great deal to be said on that, yes.

Q. It took four months to manifest itself, didn't it? A. If you compare them with the same months of the previous year that's right.

Q. Don't you know what the real reason for that fall off in November was? Don't you know it was because they routed the Mt. Royal buses to go by Charles Street and thereby took away a large part of the traffic? A. I don't remember, Mr. Howard.

Q. But if that were a fact, it would account for that falling off to a large extent, wouldn't it? A. If that were a fact it would account for some falling off. I am not prepared it would account for that falling off.

Q. Suppose that to be true, that the Mt. Royal bus was routed at the time of the falling off to go along the Charles Street route? A. Yes.

Q. Would you still think that the falling off that resulted four months after the fare was raised to ten cents was the result of raising the fare to ten cents? A. I think you would have to take a long enough period before and after any fare change to get the full effect of it, because otherwise purely seasonal business would throw your figuers out, one way or the other.

Going back to exhibit No. 19 for a minute that's one trouble we found with some of those figures; that we could only get a comparison for two or three months, which I didn't feel was quite comparable.

Q. Then let me ask you the question this way, Mr. Wolf. Admitting the fact, as you do, that there was not a falling off, but a rise for the first four months, and admitting the fact that you don't yet know but which I am asking you to admit for the sake of argument, that at the time of that falling off in November, the Mt. Royal bus was routed so as to get a considerable part of the Charles Street traffic, admitting those two facts, as I say for the sake of argument, you would still say that the illustration given here, that the effect of the ten cent fare was a fair one? A. I would like to study the factors of the cutting in of the Mt. Royal bus line, to say whether or not the figure was fare, but I think the method is fair.

Q. I am asking you whether this still indicates if those two things are true, one of which you admit, that the first four months was not a falling off, and the other I only ask you to admit because we say so, and that is that the

Mt. Royal bus was routed so as to get much of that traffic, would you say there was anything in this drop of minus 4.6 that there was anything in that indicating, by a continuance of the ten cent fare that falling off of passengers? A. I still do, unless the Mt. Royal bus counteracted on this decrease. I think the method is fair. The percentage might be decreased. I do think this in connection with the Charles Street bus line, and I used these calculations, after a great deal of hesitation. I think the Charles Street bus line does go thru such a different kind of territory that the average street car in Baltimore City, that it's right hard to draw an exact comparison.

(Mr. Tingley) As a matter of fact it draws largely from people who are able to pay a ten cent fare than the riders on a street car?

(The Witness) I think so.

(The Chairman) By the way, this is based on actual rides and not on revenues?

(The Witness) Actual rides. Yes, sir, the same as the table before, Mr. Chairman, Ex. No. 19, actual riders and not on revenue.

Q. Referring again to your exhibit No. 20, the 4.6 per cent, the last figure on the table, is a bringing down of the 4.6 per cent above, isn't it, or is it a different 4.6? A. That's the same.

Q. The upper one is not any one calendar year, is it? A. Yes. I got at that for the same period, for the period ending June 30, 1923, as compared with the period ending June 30, 1922.

Q. What I mean is the table at the foot is supposed to be that of the calendar year? A. The heading just above those two lines at the bottom explains that.

Q. It's a year ending June 30? A. That's right.

Q. And your bus figure covers years. You have an overlap of a year? A. Both figures cover the year ending June 30, 1923.

Q. Your bus figure in that particular case you had a whole year to compare? A. Yes, sir.

Q. And you compared the whole year? A. That's right. As I said yesterday in all of these figures where I had a year I used it which I thought was the fairest way to get at it.

Q. Now your Exhibit No. 21 is a study of the East Fayette Street bus passengers, isn't it? A. That's right.

(The Chairman) Excuse me one moment, Mr. Wolf, this Exhibit No. 20 deals with the Charles Street line alone?

(The Witness) Yes, sir.

(The Chairman) Not the Mt. Royal line, although it runs out Charles Street?

(The Witness) That's right. The Charles Street bus line only.

Q. Of course, Mr. Wolf, the routing of the Mt. Royal line so far as it takes away any part of the traffic of the Charles Street line would be reflected in the travel on the Charles Street line? A. The Mt. Royal line does follow the Charles Street Line for a few blocks.

(The Chairman) It goes clear out to Union Station practically.

(Mr. Tingley) How many blocks is it, Mr. Wolf?

(The Witness) It's from Baltimore Street to Mt. Royal Avenue, if that's the street. That must be sixteen blocks.

Q. It's from Baltimore Street to within reach of the two stations, isn't it? A. Some walking distance, yes, sir. I don't thing it had such a tremendous effect, but I will be glad to study it out.

(The Chairman) But you did not include the line that runs out Mt. Royal Avenue in the Charles Street Buses?

(The Witness) No, sir.

Q. I was asking you, Mr. Wolf, about Exhibit No. 21, which was the East Fayette Street Bus route. Your study there covers two years, during which there has been, I believe, a uniform fare, hasn't there? A. That's right.

Q. And that fare was what? A. Seven cents.

Q. Now down at the foot you have below "Per Cent of Increase," you have got the November and December figures? A. Those were simply put on there as explanatory figures. Of course, we have not yet gotten the figures for the same two months of 1927.

Q. You show by that though a very large jump between November and December, don't you? A. Yes.

Q. Isn't that coincident with the withdrawal of car service on a parallel route? A. I think there is some reflection there, yes.

Q. As a matter of fact there was car service withdrawn, wasn't it? A. That's right. The rerouting took place in November, 1926.

Q. And very naturally withdrawing car service on that parallel route would have an effect on increased bus riders, wouldn't it? A. Have some effect. I don't believe, though, in passing it would have anything like 22 per cent effect.

Q. No. 22 was your graph in which you undertook to compare what you call the cost of living with the average fares, wasn't it? A. That's right, using the United States Bureau of Labor Statistics all commodities wholesale index.

Q. And, of course, your average rate of fares starting with five cents flat and ending with the proposed ten cent flat showed an almost 200 per cent increase, didn't it? A. That's right.

Q. Why do you call that a cost of living graph? Isn't there a substantial difference between cost of living and average prices of wholesale commodities? Isn't there a well recognized distinction between the two? A. The United States Bureau of Labor Statistics gets up a number of different curves and trends, index figures. This represented the latest information we had available, and inasmuch as Baltimore City is pretty largely a wholesale and industrial city, it seemed to me it was a fair curve to use for those purposes.

Q. I am not criticising the platting of the wholesale commodity curve for the purposes of comparison. What I am trying to criticize is calling it a cost of living curve, and what I am asking you isn't the cost of living curve well recognized as something that isn't the same as the wholesale commodity curve, but is based on various items, including fuel, rent, clothing and certain selected things, and isn't it a recognized thing that the cost of living curve has not dropped since the peak near as much as the wholesale commodity curve as you have used here? A. It depends on what cost of living curve you take, Mr. Howard.

Q. I mean take any cost of living curve, and hasn't it dropped less than the wholesale commodity curve has since the peak of the post-war period? A. I think in most cost of living curves that I have seen there has been a less decrease—let me put it the other way, a little greater increase since 1914 than the wholesale commodity index. I am hesitating to say there has been a less drop from the peak.

Q. Let me put it this way. If you had adopted any of the cost of living figures that you speak of, the discrepancy at the end that you have got here between the fare curve and the dotted curve that would then represent the cost of living wouldn't be as great as it is on this graph, would it? A. I think that most cost of living curves would have brought me out a little higher than this dotted line, that's right. Just how much I am not sure.

(Mr. Tingley) And the dotted line is below seven and a half cents?

(The Witness) That's right.

Q. The point I want to bring out is that this is a wholesale commodity curve. A. Yes, sir. I started out to be very careful to use that wholesale index, because I realize that every curve depends upon the material that goes into it.

Q. Why did you change it then and call it a cost of living curve? A. Did I call it that in my direct testimony?

Q. I understood you to call it that, comparison of the cost of living with car fares in Baltimore. A. Yes.

Q. Now it is not really a comparison with the cost of living is it? A. It is one comparison. As I say you can get any number of curves that will give different results.

(Mr. Tingley) Can you find one that would bring you out on the level of that ten cent fare?

(The Witness) I am certain I couldn't.

Q. Nobody ever supposed though that anyone lived on this average selection of these wholesale commodities, did they? A. Not very many people living on these cost of living curves either, I think.

Q. But that is an attempt to represent an average or an ascertainment of what people do live on. The wholesale commodity curve is not. A. Mr. Mitten's market basket was an attempt to get at that too.

Q. But you don't live off of market baskets alone. You have to have clothing and rent and fuel? A. That's right. This wholesale index I think includes all those items, just weighted differently.

Q. I only want to call attention to the fact that you call this a comparison of the cost of living with car fares. A. Yes.

Q. And I want to ask you again if it would not have been fairer to say a comparison of average prices of wholesale commodities with car fares. A. I admit that it would have, yes.

Q. Exhibit No. 23 is merely a tabular form that you have reduced to a graph in Exhibit No. 22, isn't it? A. That's right.

Q. So what has been said about the plat would be applicable to what can be said about the table in No. 23, isn't it? A. That's right.

Q. Now exhibit No. 23, which was an exhibit under which the present fares in cities having a population of over 100,000 people are shown, up to what point of time did you bring the study of that? A. July 1st.

Q. You haven't taken account of any subsequent changes since then? A. No sir. It might be interesting to point out some statistics I worked up from that table last evening, Mr. Howard, if I may be permitted here.

Q. I think perhaps I might finish what I have to ask you. A. Mr. Howard, I don't know but what I made a mistake in saying that this was only up to July 1st. Mr. Nodder called my atention to the fact that one change in Erie, Pa., took place on August 15th, 1927.

Q. In the main, though, your recollection is you did not have information after July? A. That's right. This was taken from the table of the American Electric Railway Associations table several months ago.

Q. Not the United Railway's Association? A. No, that's something different.

(The Chairman) Q. Was any later data available to you?

(The Witness) Not as comparable as that, Mr. Chairman, I think I might have pieced it up from various sources of information had I had the time to do it. This information was not available for several months after July 1st.

Q. That table involves a great many details and I think we can perhaps go over it better by our own witnesses than taking the time to go over it with Mr. Wolf.

Exhibit No. 25, Mr. Wolf, "Comparison of results of street railway operation in 1926 in other cities comparable to Baltimore." I think you explained in your direct examination how you got the figures under the heading "Base," isn't that right? A. Tried to.

Q. That is the place where there was most room for selection, isn't it, Mr. Wolf? A. That's right.

Q. You had to do more constructive work of your own under that column than any of the others? A. I tried to get an expression of opinion from the Commission representatives in these various states upon which to base that claim, and I think I can support from information I have, ever figure I used. I will be glad to make

any information available to your people if they want to go over it at any time. I had some interesting comments from some of the people as to what the fares ought to be and so on.

Q. Exhibit No. 26 is a somewhat different sort of table isn't it? A. Yes.

Q. The first two paragraphs are your own composition and the following paragraphs on the first page are extracts or summaries of what was said in those different reviews, aren't they? A. That's right.

Q. One of the authorities you quote is Mr. Babson, isn't it? A. That's right.

Q. And you quote him as saying that the immediate outlook is moderately good? A. That's right.

Q. Doesn't he say a good many things in what you are quoting from that gives a pessimistic outlook for next year? Doesn't he say that there is going to be a steady mortality in the form of failures next year? A. I don't see that readily on the statement I have here.

Q. Moderate failures this fall, but heavy mortality next year? A. I don't see that in my statement.

Q. Wasn't what you went on business outlook for 1928? A. The particular excerpt that I have here was gotten up by Westheimer Survey of October, 1927.

Q. Didn't Mr. Babson say this, outlook for 1928, good volume of business, less than in 1927? A. That isn't on this.

Q. Mr. Babson must be two-faced.

(Mr. Clark) All those fellows are. It depends on which side of the market they are on.

Q. Where did you get your Harvard Economic Service? Have you that before you? A. Yes. I began to read from this bulletin gotten out by the Westheimer Survey.

Q. We have the original sources here apparently. Didn't Harvard Economic Service say this:

"Because of the exceptional ease in money and also because of the conservatism of business during the past year, the outlook is definitely favorable to the maintenance of general business during the first half of 1928 in something like its present volume." A. I haven't that quotation.

(Mr. Tingley) That doesn't conflict with what you have, does it, Mr. Wolf?

(The Witness) No sir.

Q. You think maintenance of general business during the first half of 1928 in something like its present volume is such an optimistic outlook? A. I think he just didn't carry it beyond that point.

Q. You thing he implied it would be better after that? A. Most of these people are referring to the availability of money, as an index or rather the index of loanable funds, and drawing from that chart it would look as if the latter part of next year was going to be much better than the first part, and that the first part would be better than the 1927 business.

Q. So much for that exhibit. Exhibit No. 27 I don't think calls for any explanation, does it Mr. Wolf? A. Except it shows this paper's outlook on business conditions and particularly the cartoonist.

Q. You sincerely think it does that? A. I would certainly give the paper credit for seriousness in printing it.

Q. That's one of the things that affects your own view? A. I thought it was interesting as to what this particular paper or papers thought of this thing.

Q. I just want to get what data your judgment was based on? A. I think my exhibit No. 26 explains the factors on which I base my conclusion.

(The Chairman) Well, no cartoonist knows anything about business.

Q. Now your Exhibit No. 28 was a summary of the statement issued by President Coolidge, wasn't it? A. That's right.

Q. Isn't it part of the business of the President to be optimistic?

(Mr. Tingley) The President of a railway Company?

Q. Well I won't ask you to answer that, but look in the second column and see if the President didn't say this:

"The increase in the use of automobiles has been a factor in the loss of railroad revenue, but this automobile increase in itself is a sign of prosperity widely distributed." A. That's right.

Q. And then a little lower down he says:

"Automobile production again is increasing."

A. That's right.

Q. That seems to conflict with one of your statements on the previous exhibit. A. It does.

Q. Are you more influenced by President Coolidge—— A. On that particular statement, I am influenced by the facts.

Q. Then you don't agree with the President on that? A. No, I don't.

(Mr. Clark) That isn't a statement by the President, it's by Mr. Essary.

(The Chairman) Mr. Clark, this statement by Mr. Essary at the very outset says:

"The White House today issued a statement of reassurance concerning present-day prosperity. It is viewed here as having been brought about by the recent behavior of the stock market."

That came direct from the White House. The President isn't directly quoted.

(Mr. Tingley) White House spokesman.

Q. Now Mr. Wolf, Exhibit No. 29 is an estimate of passenger revenue of the United Railways for 1928, assuming a 1% increase in full fare passengers, isn't it? A. That's right.

Q. Where did you get that one per cent? That's a pure assumption, isn't it? A. That's the assumption I made for the purpose of this exhibit.

Q. Is it based on the President's letter we just read, or just what? A. It's based on my general idea of just what next year will bring forth and conservatively at that, I think.

Q. Why do you assume so much greater increase than 1% in some of these special fares like Bethlehem and others? A. I only followed there the general trend of those fares during the past several years, and I think that the trends shows a greater increase than 1% in some of them, less in others.

The third county zone for example, I took approximately the same as this year because there has been very little change in the last several years. The same in the second county zone. The Bethlehem Steel passengers have been increasing much faster than 1%, as have the first county passengers.

Q. In other words this represents your judgment? A. That's right. I will be glad to tell you how I got those figures.

Q. Let me ask you one thing, Mr. Wolf. You said just now, I understand, that any increase would be burdensome that caused a falling off of passengers, and in your table of results in different other cities there were fallings off that you interpretated to increases of even less than a cent in fares. Isn't that right? A. Yes.

Q. Like the one in Birmingham, a very large substantial falling off? A. There was an increase of one cent there.

Q. Why have you supposed that a one cent charge for transfers, unlike other increase in fares, is not going to have a falling off of passengers?

(Mr. Tingley) He didn't.

(The Witness) If you will look at the bottom of the table you will see I have assumed there would be a 20% falling off.

Q. In the use of transfers? But you do not assume any falling off at all in the amount of passengers who paid. In other words, you assume that the fact that a man has to pay one cent for transfers is not going to effect riding at all, except insofar as it affects whether the man is going to take and use a transfer or not, isn't that right? A. I assumed this, that under this condition of fares, this combination of fares there would be an increase of 1% in adult passengers and a falling off in the number of transfer passengers. Now, I am not saying and I have not said here, what increase in adult passengers I would have used had we not figured an increase in the transfer passenger charge.

Q. Let me make that clear, Mr. Wolf. Everybody who uses a transfer with the exception of free riders and some others, begins by being a fare passengers, doesn't it? A. That's right.

Q. Before he can use a transfer he has got to become a rider? A. That's right.

Q. And in the falling off of 20% that you have assumed to be due to the charge for transfers— A. That's right.

Q. You have figured that falling off for the use of transfers? A. That's right.

Q. But you haven't considered that the mass of general riders would be otherwise be affected at all in this calculation? A. Except to this extent, Mr. Howard, that I have only considered a 1% increase of full fare passengers under this combination.

Q. What was the increase you supposed if you hadn't put a transfer charge on? A. I didn't work that out.

Q. Is it true that you arrived at your 1% by first supposing a falling off and then supposing— A. I arrived at it by assuming the condiitions which I felt would obtain under this combination of fares.

Q. Now it is true, isn't it, if any man wants to go from one place to another he very often will have to use a transfer or else walk a considerable distance, so that the question of whether a charge for transfers is made is in substance, an increase in fares as much as a direct in-

crease in fares would be? A. It is for a certain percentage of the people, as I tried to show in this next exhibit. It is more particularly for the long haul rider.

Q. Now this item at the foot of your table of an assumed 20% in loss of transfer riders. That's something that you had almost no data to go on? A. That's right. That is a pure assumption.

Q. It's a pure assumption? A. It seemed to me what would obtain under these conditions.

Q. You don't know whether it would be 30 or 40, or 10 or 12, it's a guess, isn't it? A. It can be only an estimate.

Q. An estimate is a broad term. A. This is an estimate and presents what I think is the maximum falling off.

Q. But a man may make an estimate of the cost of a building which would be within 10 or 20% of the result. A. I hope this is within that too.

Q. And there are other matters of an estimate which is a much more hazardous thing? A. That's right.

Q. And this is something that you have almost no data to go on and had to create what you call a pure assumption, isn't that right? A. It is an assumption.

Q. Or a guess, isn't it? Isn't it a fair thing to call it a guess? A. If you please. As Eddie Cantor said: "Grape Fruit under any other name will still squirt in your eye."'

Q. We will call it a guess then. That was No. 29.

Now No. 30 is the result of a study that you had made under passengers on the Harford Road cars between North Avenue and Monument Street, I think you said of three days, didn't you? A. That's right.

Q. And you selected the peak hours, didn't you? A. That's correct.

Q. What Monument Street crossing is that? A. Monument and Aisquith Streets.

Q. That's a relatively short section then, isn't it? It's from North Avenue? A. What do you mean?

Q. What is the lineal distance that your study covered from North Avenue south to what? A. Monument and Aisquith.

Q. Are these all the stopping places between those two? A. Those are all the transfer points between those two as I recall it.

Q. I want to get the idea. You have reduced your results to an average, haven't you? A. That's right.

Q. And the average results show 66 people arriving at North Avenue? A. That's right.

Q. And a certain number getting off and a certain number getting on and then the remainder riding on to the other corner? A. That's right.

Q. Am I to suppose that anybody got on or off at any of those other intermediate stopping places? A. No, I don't think it would have any affect on the table.

Q. How could you count it without counting that? Suppose it were a single car instead of an average car? A. Yes.

Q. You arrive at North Avenue with 66? A. Yes.

Q. 12 got on, four got off, that left 58? A. Yes.

Q. Well it wouldn't arrive at Federal Street with 58? A. That's right.

Q. So that if five got off there wouldn't be 53 left if anybody had gotten off or on between? A. Our check would indicate that the number who got off and got on between those transfer points was very small.

Q. It apparently would indicate it was so small that there wasn't as much as one whole passenger? A. That's so.

Q. Is that so? A. That's true, according to our figures, yes. My view this is an average set up. It isn't an attempt to portray the thing accurately, because you would bring it out to tenths of passengers.

Q. When you have an average of zero here that means an average of less than one? A. Yes, I think that's right.

Q. You don't mean to say that during your whole study nobody got on at Federal Street? It means less than one during the peak time? A. That's right.

Q. And it also means that during the average of your whole study that less than one got off between those transfer stations, is that it? A. That's right.

Q. Now your study is based on this supposition, isn't it, Mr. Wolf, that everybody who got on or off at those stopping places came with a transfer and was using a transfer when he got off? A. Yes.

Q. As a matter of fact passengers get on and off at those corners that don't use transfers? A. That's right.

Q. But you ignored them? A. The big bulk of these passengers are transfer passengers.

Q. Your study is based on the assumption too, that everybody who got on or off at these points used transfers, and you think it wasn't based on the assumption that nobody got on or off in between, but it was based on the assumption that it was less than one? A. Our results showed that there were very few passengers got off in between. In other words the main assumption was that the bulk of this business coming in in the morning came below Monument and Aisquith Streets, except for the transfer business.

Q. The purpose of your study was to show the relative amount of long haul transfers as you call them and short haul transfers? A. That's right.

Q. For that purpose what did you consider to be a long haul and what a short haul? A. The passengers who came in in the morning and got off at North Avenue, certainly originated above North Avenue, and they were therefore classified as long haul passengers.

The passengers who left the car at Federal Street were also considered as long haul passengers under the assumption that there would be very few people coming across North Avenue, transferring south to Harford Road and hence transferring at Federal Street. There may have been a passenger or two who boarded the car south of North Avenue and who left it at Federal Street to

transfer there to that line, but I have not allowed for that passenger.

Q. Let me see if I couldn't express it in a word. Every passenger who got on during your study was a short haul passenger. Everyone who got off was a long haul passenger, isn't that the assumption? A. That's right. In the morning. The reverse is true in the evening.

Q. And the reverse in the evening? A. That's right.

Q. Exhibits No. 31, Mr. Wolf Now we are in the realm of estimation again, aren't we? A. That's right. More educated perhaps.

(Mr. Tingley) More so than on the ten cent fare exhibits you think.

(The Witness) I hope so.

Q. This is your estimated passenger revenue for 1928 with an eight cent full fare and a five cent county fare? A. That's right.

Q. What is your suppostion there as to the effect on riding with your half cent increase? A. That the total number of full fare passengers would be 3.17% increase over 1926, which was the same experience as for the first nine months of 1927, and if my prediction as to 1928 being a better year than 1927 is true I think I have discounted somewhat the effect of the increase in passengers.

Q. Let me get that straight. You say you have assumed in 1928, you are comparing it with 1926 now and not 1927? A. That's right.

Q. And you assume a what percentage over 1926? A. 3.17%.

(Mr. Tingley) That's decrease.

(The Witness) That's right.

Q. Expressing that in terms of 1927, how would that effect— A. That was exactly the decrease that was experienced for the first nine months of 1927, so if that same percentage had held for the 12 months of 1927, 1928 would be the same as 1927.

Q. So you assume your 1928 result here will be the same as the first nine months of 1927? A. That's right.

Q. And the first nine months of 1927 as compared with previous years shows better than the whole year is going to show, isn't that a fact? A. That's still nebulous.

Q. As far as we have gone indicates that, doesn't it? The first nine months show better than the figures up to the latest date you have got them for, don't they? A. In percentage of revenue passengers, decrease?

Q. As compared with previous years? A. Yes, but of course, Mr. Howard, you have to remember this, we are now comparing the heavy months of last year, namely November, which I think was about the second heaviest month of the United, and then we're going to compare December, so we naturally expect a little further falling off as compared with 1926. Now, when we go to 1928 we naturally expect an increase over 1927.

Q. I am asking you to compare the period of 1927 that has elapsed with the corresponding period of 1926. You have said yourself the longer the period the more fairer the result, haven't you? A. Yes. I haven't reduced that to figures, Mr. Howard.

Q. Let me get you straight again, Mr. Wolf. You assume in your estimate of what the result of adding one cent for transfers would be, you assume that that would have how much effect on the future year's business. You dock it how much? Only to the extent to which you dock transfers? A. The transfer passengers would be decreased 20%, and in spite of that transfer charge the full fare passengers would increase 1%.

Q. Now you assume on the contrary that one half cent increase in the fare would have what result on the passengers as a whole? A. Would increase the number of passengers in 1928 over 1927 by 300,000. In other words a very slight increase, believing as I do that the eight cent straight fare would have a more adverse effect that the present fares with the one cent transfer charge.

(Mr. Toole) What is the next to the last column, that total? Is that correct?

(The Witness) That .0773?

(Mr. Toole) Yes.

(The Witness) That's the average fare paid by all of the riders estimated for 1928. 7.73 cents.

(The Chairman) A little less than seven and three-quarter cents.

(The Witness) Yes, sir.

Q. Now Exhibit No. 32, Mr. Wolf, that's another one of these exhibits, isn't it? A. That's right.

Q. That's based on the supposition that there were no change in the present fares, except a charge of one cent for transfers and a full fare charge for all employees and all concessionaires? A. That's right.

Q. You got your figures as to the saving that would result from changing full fares to employees, you get that from Mr. Nodder's studies, didn't you? A. That's right.

Q. Do you vouch for that, too, in any way? A. I would take his word as far as it being correct.

Q. You know enough of his study to know that he has assumed that with the exception of the effect that the use of transfers would have on it, he assumes that the people who ride for nothing would ride just as much if they were charged full fare, is that right? A. Yes.

Q. Don't you think, to express it your way, that a change from a zero fare to 7½% fare, would be a burdensome increase and show its effect on the riding? A. Yes, I do.

Q. Isn't that a flaw in his calculation?

(Mr. Tingley) We took Mr. Emmons' word for the fact that it wouldn't. I thought he said the fare couldn't have any effect on riding.

(Mr. Howard) I don't think he made any such broad assertion as that, Mr. Tingley.

(Mr. Tingley) I don't see how he could.

Q. Don't you know, too, as a matter of fact, that many

of those tickets are used for Company business, when in any case the Company would have to incur the expense if it abolished the use of the tickets on that occasions? A. Very few of those.

Q. It is a fact, though, isn't it? A. I would hesitate to say that it is. I think possibly most of the Company business done by these people would be by automobile.

Q. The study is Mr. Nodder's in the main and not yours? A. That's right.

Q. But you must have noticed the fact that he allowed nothing for any falling off in riding due to the increase from zero to full fare, didn't you? A. If I told the whole truth about it, it would be this: that he used the factor of 85, something for a decrease and I didn't go behind that. As I recall that was an allowance for tickets issued but not used.

Q. That was based on the use of transfers. A. No. He used the 85, something which was allowance for tickets issued but not used.

Q. And he also made an allowance for this fact; that at present no transfers are given on tickets? A. That's right, but I didn't go behind those figures.

Q. Was your attention drawn to the fact that no allowance was made for any diminution in riding? A. No. I don't think Mr. Nodder was taking those points into consideration. It would be interesting to know if the Company really thinks there would be a great increase in falling off.

Q. My present interest, Mr. Wolf, is in knowing whether you and Mr. Nodder think there would be no falling off due to that fact? A. Perhaps Mr. Nodder and I didn't co-ordinate our value of service so well.

Q. He will speak for himself? A. That's right.

Q. Now your next exhibit No. 33, which is a comparison of net income estimated for 1928 with tests applied by the Commission in 1924, that is based on your estimate of the effect of an eight cent fare or a one cent transfer charge, isn't it? A. It is a comparison of the effect of the

one cent transfer charge and full fare for employees and concessionaires, with other fares remaining in the same.

Q. Well that's a simple arithmetical application of the results in the previous table of the figures heretofore used by the Commission, isn't it? A. That's right. It does show I think that that combination of fares would meet all the tests heretofore applied by the Commission in addition to the 6% net on the present fair value.

Q. Now Ex. No. 34 is supposed to be based on the Company's calculations in its exhibits as a result of the ten cent fare, isn't it? A. That's right. That's ex. No. 34.

Q. Now you have made a number of changes which are indicated by the note a, b, c, d, etc? A. That's right.

Q. To bring about a different result. In the first place, you have scaled their estimate of operating expenses in the way you have described by taking out part of what they claim for power and part of what they claim for accidents and part of what they claim for changes? A. That's right.

Q. And then under B, you have used the 5% on gross for depreciation? A. That's right.

Q. Instead of any allowance of value? A. That's right.

Q. Then under taxes you have disallowed the additional taxes that they claim, is that right? A. That's right.

Q. And you do that because you think, I think you used the expression in testiying to that that the Commission ought to be satisfied that it's final before they base action on it, is that right? A. That's right.

Q. When would you be satisfied that it was final? A. Whenever the State Tax Commission takes the final action. The State Tax Commission now has before it, as I understand, the task of appraising the capital stock of the Company, and if it sets a figure for that capital stock equal to last year's figure the $75,000 which the Company has paid, or will pay this year for increased real estate taxes, will be absorbed in the capital stock taxes, so that the total taxes will be approximately the same as last year.

Q. This has reference to taxes for 1927, hasn't it? A. 1928.

Q. I mean the tax bill that the question has arisen about? A. That's right.

Q. And that is based on reports made last spring, aren't they? It's taxes that ought to be paid before aren't they? A. It's taxes to be paid for 1927, that's right, but the case has not yet been decided, Mr. Howard, and unless and until it is decided no one would know whether it is zero, as I have used or 75 thousand dollars which the Company has used.

Q. Aren't you assuming that the Commission would depart from the Law if they strike that out? A. No, I wouldn't presume to interpret the law for them, but it is up to them to determine how much they will assess the capital stock for them.

Q. Now your exhibit No. 35 is an effort to guess a little further in to the future? A. No, sir, it's an effort to put into figures the estimates and testimony of the Company.

Q. Now the Company in its exhibits has undertaken to make an estimate of what the result of the ten cent fare would be for 1928? A. That's right.

Q. Now what you have done is to attempt to produce that two years longer, isn't that right, 1929 and '30? A. Based on the Company's statements.

Q. Now isn't your method to assume that the changes that take place in 1928 continue progressively thru each of these other years? A. Just according to the testimony.

Q. Now let's see about that. In the first place, the passenger revenue, they assume that there would be a fall off in passengers travelling next year, didn't they? A. 5%, that's right.

Q. You have assumed that same fall off to keep on continuing progressively, haven't you? A. No, sir, not quite, Mr. Howard. The testimony was to the effect that next year may show a 5% decrease if the ten cent fare is granted, and that a 3% decrease would be experienced

otherwise and would probably be experienced for the next several years.

(Mr. Tingley) Mr. Emmons testified to that under cross-examination.

(The Witness) So in 1929 and 1930 I have decreased the passenger revenue of the preceeding year by three per cent.

Q. So you have assumed a continuance in each of those years of a shrinkage of 3%? A. I only tried to put down in figures what was actually said. May I carry it a step further, Mr. Howard?

For the final column of 1930.

Q. The second 1930 column is the 11 cent fare? A. And for that purpose I did assume a 5% decrease over 1929, before adjusting for the increased fare.

Q. Now you have assumed for this calculation that taxes will progressively each year, haven't you? A. Slightly, yes. That seemed to me to be fair.

Q. And you have assumed that there will be a wage increase each year again and again of $130,000? A. No assumption of mine, Mr. Howard. Only what was said here.

(Mr. Tingley) One was contracted, one was promised, and one was hoped for.

Q. Your results are figured on the supposition that those progressive increases and decreases all take effect, aren't they? A. No assumption of mine, Mr. Howard.

Q. Isn't it all assumption?

(Mr. Tingley) It's all Mr. Emmons' assumption.

(The Witness) I am only putting on paper what was actually said here on the witness stand.

NOTE: The Commission then adjourned for the purpose of taking a short recess.

AFTER SHORT RECESS.

CROSS EXAMINATION

(Continued).

By Mr. Howard:

Q. Mr. Wolf, exhibit No. 36, is an attempt to tabulate two different years and compare them for certain purposes and the tables speak for itself, doesn't it? A. That's right.

Q. And Exhibit No. 37 is an effort to compare the cost of superintendence in two consecutive years, is it not? A. That's right.

Q. Now we come to Exhibit No. 38. These are some exhibits that have to do with the depreciation account, aren't they? A. Yes, sir.

Q. Suppose we take No. 38 and No. 39 up together. No. 38 as I understand is an attempt to figure out a depreciation allowance from the Company's claim as to the condition of its property in the valuation case, and Exhibit No. 39 is a similar attempt to figure out a depreciation allowance from the Commission's findings as to condition of property in the rate case, is that right. A. That's correct.

Q. They both are based on this idea, aren't they? That if the property in question had an average life at the time of the Commission's finding of so many years—— A. Average age.

Q. An average age, I should say at the time of the Commissions findings that then if you divide the observed depreciation by that average age, you get the amount to be set by each year to provide for depreciation or replacement, is that right? A. To provide for that depreciation estimated by the Company and found by the Commission, that's right.

Q. Now a very important element in those tables is the age problem? A. That's right.

Q. How did you get that, because that's something you have to figure out or estimate it in some way, didn't you?

A. That's right. We went back and arrived as near as we could at the time when each element each constructed.

Q. Went back to what? A. To our own knowledge and information that we had as to when each element was constructed.

Q. Well, let's take the first item, track and roadway, you have put down 15 years as the average age at the time of the valuation? A. Yes.

Q. How did you arrive at that? What information did you have. Is that a weighted average or a mere average? A. That was gotten at by a study of the retirements or rebuilding program of the Company over the past several years. The Company has been rebuilding tracks that have been in service approximately 27 years. During the war they did not rebuild very much track, and taking that fact into consideration, as well as considering the amount of rebuilding they are doing at the present time, we arrived at a figure of 30 years as representing the oldest track in service, not individually but collectively, and the average of 30 years from nothing gave us 15 years.

Q. So it wasn't a weighted average, it was a mere rough average you struck off as 30 as the oldest and zero? A. It is an average based on the Company's experience as near as we could get at it.

Q. But as I understand your method was to find the oldest track of all, or 30 years and of course the newest track or zero and the average of that was 15? A. We didn't take the oldest individual piece of track. I don't mean to say that. We took the oldest lot of track as represented by the replacements of the Company since 1923.

(Mr. Tingley) There is some individual track older than 30 years, isn't there, Mr. Wolf?

(The Witness) Oh, yes.

Q. Now following that method did you do it with reference to the present date or 1924, the valuation date? A. The valuation date.

Q. If you figured that the oldest then track of any considerable extent was 30 years, and you halved for your average? A. That's right.

Q. And does that process describe the way you got the other ages there in that column? A. For bridges, tressels and culverts we had what we thought was very reliable information based very largely on what we gathered at the time of the valuation, plus some testimony introduced by the Company's witnesses as to the years in which the large items were built. Those items were weighted, and an allowance made for small culverts which we did not have.

For the buildings the same remarks as applied to the bridges, tressels and culverts, still hold.

For the electric system we averaged it out somewhat similar to the track and roadway.

For cars we had rather accurate figures.

For station equipment we had what we thought was accurate data.

Q. So, Mr. Wolf, that describes the method at which you arrived at the figures under the age column? A. That's right.

Q. Now let me ask again to make sure. These two tables are an effort to arrive at what would be a proper depreciation allowance, the method followed being to take the extent of observed depreciation at the time of the valuation case, and divide that by what you find to be the average age of the property in question. A. That's true insofar only as the Company's exhibits are concerned, not insofar as the Commission's findings are concerned, because the commission in its opinion found, that the depreciation occurred from whatever source, and that was the depreciation which they considered. In other words they considered something over and above the pure physical depreciation which the Company's witnesses portrayed.

Q. I don't want to go over each of these tables separately, because a good deal would apply to both? A. That's right.

Q. So I want to dispose first of the Company table and then take up the Commission one. A. That's the only main difference between the two in the method.

Q. On the Company table you have assumed the accrued depreciation to be that which was claimed by the Company in the valuation case? A. That's right.

Q. And which was not allowed by the Commission? A. That's right.

Q. So has that any special significance? Isn't the important one the Commission finding? A. I don't think so, except it perhaps shows some comparison of the Company's claim for annual depreciation and what the Company thinks of the condition of its property when it comes to a valuation case.

Q. But why go back of a finding of the Commission arrived at as a result of long hearings, why go back of that in order to take the figures advanced by the Company and not allowed, as the basis of your calculation?

(Mr. Tingley) It shows the changed point of view.

Q. Aren't we entitled to assume the Commission's view is to be adopted? A. If you did that 100% on your claims for depreciation today, we wouldn't have any quarrel with you.

Q. Now let's come to the Commission one. I understood you to say that the Commission one, the exhibits based on the Commission findings, that that had a greater authority for two reasons, in the first place because it is based on the Commission's finding and not on the Company's claim, but then you said further that the Commission had expressly said it took obsolescence into account? A. That's right.

Q. And that that was another reason for giving this a greater finality? A. That's right.

Q. Now is that a sincere attempt, Mr. Wolf, to find out what the depreciation rate ought to be? A. That is a sincere attempt to find out what the depreciation rate ought to be based on the evidence and conclusions in the valuation case.

Q. Let me see if it is. Turn your attention, for a moment, to the item of cars. You say that there ought to be allowed, I will call it one cent, it's 1.01%, isn't it? A. Yes.

Q. Doesn't that lead to the conclusion that an allowance of one percent a year will suffice to replace cars, and doesn't that involve the absurd hypothesis that a car on the average will last nearly 100 years? A. I think there was some testimony in the valuation case to the effect that if any item of property was maintained it would have an indefinite life.

Q. I am asking you, Mr. Wolf, tho, is it not an absurd hypothesis to suppose that street railway cars will remain in service, or may remain in service for anything like 100 years? Isn't that an absurdity? A. I wouldn't attach that word absurd when we are discussing a Commission decision.

Q. I didn't ask that. Do you mean to attribute to the Commission in this case, to attribute to the Commission in the valuation case the absurd finding that street railway cars on the average will last 100 years? A. The result of this computation, absurd tho you may term it, means that 1% set aside annually on the reproduction cost of railway cars would have produced the depreciation estimated by the Commission to have existed at that time.

Q. That brings me back to the question I asked just now. I asked if this was a sincere effort to find out what would be a proper depreciation charge? I am now going to ask you this question. Isn't this really an attempt to throw ridicule on the finding of the Commission in the valuation case? A. No.

(Mr. Tingley) By whom, Mr. Howard? You or by Mr. Wolf?

(Mr. Howard) By Mr. Wolf.

Q. (by Mr. Howard) Isn't it an attempt to discredit the finding of 15% depreciation of whatever the figure was on cars in that case. A. I would rather say it was

an attempt to show that the $2,200,000 claimed by the Company was discredited.

Q. Now I want to get your own fair judgement from you on this. Don't you think it is an absurd thing to talk about a street railway car lasting on the average anything like 100 years? Isn't that an absurdity? A. I don't think they will last that long.

Q. Isn't that an absurdity? Don't you know it? A. Well, I know that with the rebuilding of your cars, you are looking forward now to a life of 30 and 50 years.

Q. But do you conceive it possible that on the average street railway cars should last 100 years? A. I don't think they would, no.

Q. Don't you know it's an absurdity? A. I don't think they would last that long.

(Mr. Toole) Did you ever hear of the one-horse-shay?

(Mr. Clark) You can make a car last that long.

(Mr. Howard) But they don't last that long.

(Mr. Clark) By replacing one part and then another part and then another part you can give it an indefiinite life, and that's what you do.

(Mr. Howard) Mr. Clark knows as well as Mr. Wolf that an average car don't last 100 years.

(The Chairman) Well, when was the street car system established?

(Mr. Tingley) 1859, the first one.

(The Chairman) How many cars in service then are in service now?

(Mr. Tingley) Some of them look as tho they were.

Q. Now, Mr. Wolf, the point I want to direct your attention to is this: the allowance that we estimate for ought to provide fairly for the necessary retirements that we have in the course of our business, ought's it? That's the purpose of it? A. The amount you are asking for.

Q. The amount of depreciation allowance that we want or ought to get, whether we are asking for it or whether it's given to us, the idea of it is an allowance to cover the retirement of property that is necessarily retired in the course of business? A. That's right. That's the amount that you ought to be allowed. The original cost of it Mr. Howard, I mean.

Q. Based on orignal cost, yes. Now an allowance of 1% per annum on cars therefore, necessarily implies the idea that on the average cars would only be retired in somewhat less than one in 100 years, doesn't it? A. Yes, that's so.

Q. And isn't therefore, I ask you again, isn't your effort by this table not one to show what would be a fair allowance to cover retirements, but one to cast doubt on the finding of the Commission in the valuation case, that there was an observed depreciation of only 15 and a fraction percent on cars? A. I don't think so in a way, Mr. Howard. Here was a great deal of testimony as to the excellent maintenance of the property and the amount spent by the Company for maintaining its property, and that was one of the strong arguments, and I am sure an appealing argument why the Commission found this percentage of depreciation.

Q. And it appeals to you so much that you think 1% per annum is a fair allowance to cover retirements of cars? A. I don't think I have said that.

Q. Why did you put it in here then? A. Because the exhibit is just what is says, annual depreciation allowance, equivalent to the Commission's findings.

Q. Well, you don't think it. You are attributing it to the Commission? A. No, I am saying that is the result of the computation, and I believe the computation is right.

Q. Now you say that's a necessary result of the computation used by the Commission in the rate case? A. That's right.

Q. And is that necessary result, as used, is that 1% a year is a fair allowance then I should say you are trying

to disprove the finding of the Commission rather than prove what a fair depreciation allowance would be. A. You might put it that way, I don't.

Q. Now let's see that a moment. You are assuming that observed depreciation that when you measure that at any time, that the amount of that divided by the number of years the property has lived will give you the probable life of that property, aren't you, in service? A. No.

Q. Isn't your assumption here that inasmuch as cars show 15 and a fraction percent accrued depreciation, that you can infer from that by a ration the number of years that those cars will remain in service, that's what you have done, isn't it? A. The 15% found by the Commission included something over and above the amount disclosed by the inspection of those cars.

Q. Your assumption then is this, Mr. Wolf; that that 15% representing the accrued depreciation as found by the Commission, that you can determine from that the probable or avarage life of those cars, or of other material in service. The point I want to make is this; let me see if I can put it plainer. There are certain factors that work against the life of cars, that do not work unifomly. A. That's correct.

Q. A car may not only become worn out from use on the tracks, but it may become obsolete? A. That's right.

Q. That may happen very quickly? A. That's right.

Q. Whether that has happened or not, whether it is likely to happen in the near future is not something which you can tell from looking at it? A. That's right.

Q. Hence besides the mortality of cars, that occurs thru their wearing out, you have a mortality that comes in a less expected way, and that wipes them out and that cannot be observed as accrued depreciation, isn't that right? A. Well, at any one time, a piece of equipment might be found to be practically or partially obsolete, and insofar as that could be determined, I take it the Commission made allowance for it.

Q. But obsolescence doesn't occur uniformly does it? A. No. Nor does future depreciation.

Q. It come pretty suddenly, doesn't it? A. Not always. Take an automobile that's no longer manufactured. The model is no longer manufactured, that don't become obsolute the day they quit making that model, but it becomes increasinly obsolete as it goes on and it's more difficult to get repair parts for it.

Q. And if I understand you correctly, you understand the Commission's determination to be in substance a finding that 1% a year set aside is enought to provide for the retirement of cars? A. It's enough to provide for a depreciation found by the Commission to have existed from all causes in 1924.

Q. Let me get at that another way. The cars that they observed in 1924, didn't include those that have gone out of service in preceding years, did they? A. No.

Q. So all that they observed, was the accrued depreciation on the then existing cars, is that right? A. All that they considered was the accrued depreciation.

Q. And during the same period in which that observed depreciation had occurred, hadn't a lot of cars gone out due to depreciation and obsolescence and other factors? A. There had been cars go out, yes.

Q. And that wasn't included in the observation of the accrued depreciation? A. No, because those cars didn't exist as of the valuation date.

Q. In other words all that they allowed for in the valuation under the head of accrued depreciation was the observed depreciation in the then existing cars, isn't that right? A. If you will interpret the word observed tho, we will get on the same footing.

Q. With some possible allowance for insipient obsolescence? A. An inadequacy.

Q. Then it comes back to this: that your interpretation of the Commission''s decision in the valuation case, as shown by this table, is that 1% per annum, ought to be a proper allowance for cars, and you say further

that you don't mean to say that you yourself think that 1% is enough but you attribute that to the Commission and pass the responsibility of it to the Commission, because of their finding in the valuation case? A. I say that that is the result of the computation as I have tried to explain it.

Q. So then we come down to this, Mr. Wolf, that this table of yours is an attempt to translate into figures applicable to a depreciation allowance what you take to be the result of the Commission's findings in the valuation case? A. Correct.

Q. And when you reach the result of that that 1% per annum is enough to provide for cars, I have already asked you the question and I will ask it again, do you intend therby to throw doubt on the finding of the Commission in the valuation case that's already been determined or are you claiming that 1% in your own opinion is really an adequate amount to allow for the retirement of cars? A. Neither one.

Q. Neither one, or the other, or either? A. Neither.

Q. People's Counsel Ex. No. 40, Mr. Wolf. A. Yes.

Q. This ties on to your two previous exhibits, doesn't it? A. That's right. The percentages are taken from exhibits 38 and 39.

Q. It's simply an attempt to cary forth the results in there? A. That's right. It's to show the application of those percentages to original cost.

Q. And of course if there are any fallacies or weaknesses inherent in the previous exhibits, that this refers to they are carried forward of course in this, aren't they? A. Oh, yes.

Q. It involves therefore the same supposition under Ex. No. 39, that about 1% per annum is a sufficient allowance for cars, and under Ex. No. 38, by the way, that was about 150 years that you assumed for the life of a car, wasn't it according to your method? A. That's right. According to the Company's testimony.

Q. But the Company never testified to that? A. Well they testified as to the physical condition.

Q. Existing condition? A. Physical condition. There was a difference between the Company's claim and the Commission's finding.

Q. That's the last of your exhibits? A. That's right.

(Mr. Howard) That's all.

REDIRECT EXAMINATION.

By Mr. Tingley:

Q. Mr. Wolf, do you recall Mr. Emmons' testimony to the effect that ten cents was the limit of service value for a unit fare for a car ride in Baltimore?

(Mr. Howard) I don't think he quite said that.

Q. Assuming that the record shows Mr. Emmons did say that, and assuming further that the record shows that Mr. Emmons said that increases in fare below that amount had little or no effect on car riding, wouldn't that indicate that in Mr. Emmons' opinion no rate below ten cents could be burdensome to the public?

(Mr. Howard) What meaning of the word burdensome?

(Mr. Tingley) In the meaning made by Mr. Wolf.

(Mr. Markell) Does Mr. Wolf interpret that?

(Mr. Tingley) I think the Commission will interpret it.

(Mr. Howard) I don't think you have Mr. Emmons' testimony correct.

(Mr. Tingley) I think the record will show that, Mr. Howard.

(The Witness) When Mr. Emmons said that a ten cent fare was a proper fare and would not show a material falling off in passengers, under my interpretation of the word burdensome as used here, his testimony would mean that a ten cent fare was not a burden on the rider.

Q. And that despite the fact that the passengers who rode the cars might think so, to the extent of ceasing to

ride or ceasing to ride to the extent they had before. A. I take it that he was giving his own view of the matter.

Q. He was giving his view and not that of the person that pays the fare? A. I would think so.

Q. Taking Exhibit No. 19, Mr. Wolf, I think Mr. Howard asked you if that didn't show that the period studied was one of a general trend of fare increases, is that correct? A. He asked me that, yes.

Q. How many of the ten cities shown show increases to a ten cent fare? A. Only two, and those are the only two, by the way, Mr. Tingley, that show increases to any fare higher than Baltimore.

Q. Mr. Wolf, if this study doesn't show that an increase in fare up to the present fare level charged by the Company results in decreased riding, why do you think that the Association of Electric Railways Companies got it out, wasn't it gotten out for that purpose?

(Mr. Howard) Are you asking him something he knows, or something you are asking him to guess?

(Mr. Tingley) Suppose we let him answer that, Mr. Howard.

(The Witness) My assumption would be that they got it out in order to show to the member companies the possible effect of changes in fares.

Q. Taking exhibit No. 22 Mr. Wolf. That shows that the United States Bureau of Labor Statistics, all commodities wholesale curve at the present time is somewhat below the present level of carfare, doesn't it? A. That's right.

Q. Mr. Howard objects to that and thinks you should have chosen a curve that would bring it higher, doesn't he?

(Mr. Howard) I don't think that's a fair expression of what my objection was.

Q. Did your studies discover any curve that could have been called a cost of living curve that would have been above the ten cent line as shown on this exhibit,

Mr. Wolf. A. Absolutely not. We have curves ranging all over the map, but none of them as high as the ten cent curve.

Q. Mr. Wolf, in connection with Exhibit No. 24, you said that you had made some studies last night, that you would like to give, but Mr. Howard wasn't interested in them. Will you give them now? A. It's simply statistics as disclosed by this report.

Of the 81 cities listed as having a population of 100,000 or more, only 19 of them have a fare higher than Baltimore. There are 30 cities with a ten cent fare. Only one of these has a straight ten cent fare with no tokens. Ten of them, or one third the number have an eight and one-third cent token fare, six of them have an eight and one-third cent token fare, plus a pass system, one of them has a seven and a half cent token fare, plus a pass system, and when the Commission recalls that at the present time 97% of the full fare passengers in Baltimore are using the token fare they will see that the ten cent-seven and a half cent fare, plus a weekly pass, if applied to Baltimore, would cause practically no increase in fare, and probably a decrease.

There is one of these 30 cities with a ten cent fare which has not a token fare but which does have a pass. and 11 of them with ten cent fares charge 7½c or lower for tokens with no passes.

I thought it was just interesting in the light of finding out what the tendency was in these so-called ten cent fare cities.

(Commissioner Purcell) Do you know how many of those charge for transfers?

(The Witness) No sir, I do not, Mr. Commissioner, but I can find out for you.

(The Chairman) I think in the emergency hearing or early in this hearing some reference was made to the Boston situation. As a result of the ten cent fare the city authorities granted a six cent return, and there was a malling below that six per cent return, which the city

made up. Can you briefly say what that situation is? What that arrangement is in Boston, do you know?

(The Witness) Yes sir, I have the details of it here. The City under its agreement guarantees the Boston Elevated 6% dividends on stock, not return, after interest charges, the whole being based on a total of about 100,000,000 dollars in securities. In addition to that the City has built and leased to the Boston Elevated certain tracks and property. The State also has built and leased some tracks and property to the Boston Elevated. In 1926 operating with a ten cent fare the City still had to make up $482,749.12.

(The Charman) Did that investment on which the return was granted represent the fair value of the property?

(The Witness) That was based on the amount of securities outstanding, and perhaps Mr. Emmons could tell more particularly about this point, but as I recall, there was a valuation started and probably used as some sort of basis for arriving at this adjustment, but the adjustment is based on the amount of the securities, rather than any value of the property.

(The Chairman) Then as a matter of fact the ten cent fare didn't pay a 6% return on the value of the property?

(The Witness) That's right, the ten cent fare did not pay a 6% dividend.

Q. Mr. Wolf, in connection with exhibit No. 29, I think Mr. Howard criticized that exhibit because it did not show that the 1 cent transfer charge did not result in any loss in passengers other than the loss in transfer passengers. If a one cent transfer charge would discourage riding, and result in a loss of passengers would you think a ten cent straight fare would result in an increase or a decrease as a result of that fare? A. I think that a ten cent fare would undoubtedly result in an increased loss.

(Mr. Toole) May I ask just one question on Ex. No.

19? Mr. Howard's suggestion there that the falling off due to business conditions, or might have been in Birmingham. Isn't it true that if there are bad business conditions that a ten cent fare would cause more falling off?

(The Witness) I think so.

(Mr. Toole) It would cause even more falling off even than under ordinary conditions?

(The Witness) That would certainly be my idea.

CROSS-EXAMINATION (Continued).

By Mr. Clark:

Q. Mr. Wolf, you read that bulletin No. 116 on which Ex. No. 18 is based did you not? A. That's right. I have it here if you want it.

Q. There's no reference in that bulletin to a jitney situation in Birmingham affecting the number of riders or revenue passengers? A. Not that I recall. I don't think there is.

Q. Mr. Wolf, concerning Ex. No. 24, this is the exhibit in which there are 81 cities included in this study? A. That's right.

Q. I notice a number of them have weekly passes. A. You will notice that's confined very largely to the ten cent fare cities.

Q. That's what I was going to ask you. How many weekly passes are found in that study? About ten, aren't there? A. There are eight weekly passes, or weekly identification cards in the ten cent fare cities, one among the eight cent fare cities and one on a five cent city, in San Diego, California.

Q. In Illinois or in Chicago it only refers to the surface lines, don't it? A. That's right.

(The Chairman) Have you any figures, Mr. Wolf, or are any figures obtainable to show the effect on the Com-

pany's revenues of the weekly pass other than the amount paid for the weekly pass itself? In other words, I mean is there anything to show what the average ride taken on the weekly pass yields to the Company?

(The Witness) What it would yield this Company?

(The Chairman) Any company.

(The Witness) I think Mr. Jackson quoted some figures in the valuation case to show the results in certain cities where it had been installed.

(The Chairman) My recollection of Mr. Jackson's testimony was that it was extremely indefinite as to what the user of the weekly pass paid for the actual ride that he took?

(Mr. Tingley) I think that's correct.

(The Witness) That's true. I think Mr. Emmons stated that Pittsburgh considers 18 rides per week on a weekly pass in computing the rides.

(The Chairman) But he could take fifty?

(The Witness) Yes.

EXAMINATION CONCLUDED.

NOTE: The Commission then adjourned for the purpose of taking a Recess.

AFTER RECESS.

Thereupon—

CHARLES NODDER,

a witness of lawful age, produced on behalf of the Public Service Commission of Maryland, having heretofore been duly sworn, according to law, and whose examination was suspended for the purpose of hearing another witness, resumed the stand, was examined and testified as follows:

CROSS-EXAMINATION.

By Mr. Markell:

Q. Mr. Nodder, as of course we all know, you are the

Accountant of the Commission and expert accountant and as your exhibits show, most of them are based on a very careful and thorough study of the various accounts of the Company, are they not? A. Yes, sir.

Q. Now in the various suggestions that you have offered to the Commission in your testimony, and involved in some of these exhibits that you have filed, are we to understand that you are making these suggestions to the Commission as suggestions, from the point of view of proper accounting, or that you are also expressing an opinion as to the law of these various questions, as it effects rate making, or as to the facts as it effects railway operations and costs? A. What suggestions, may I ask, are you referring to?

Q. I am speaking of your suggestions as a whole. I want to know whether they are to be understood from the Accountant's point of view, or whether the figures you submit are submitted as the view of the law or of the fact? A. Some of the suggestions I have made have dealt with accounting problems, some perhaps an opinion. I have not tried to interpret any law.

Q. You mean opinions on accounting or opinion on law. A. Opinions following an occounting experience.

Q. You mean opinions on law, or on accounting? A. Not on law, on accounting.

Q. So you have taken these various facts and the various accounts that you had to deal with and you have presented them, in what you understand to be the correct accounting methods? A. As a general rule, yes. Practically all of them. I don't know just which particular suggestions you have in mind, and I am only answering in the dark.

Q. I just want to avoid arguing with you by trying to get at the outset the scope of your testimony.

So that the matters that are matters of accounting that you have presented to the Commission, you present as your opinion of the proper accounting, and you

don't undertake to express any opinion as to the application of the law to those matters for rate making?

(Mr. Tingley) I think that will be conceded, Mr. Markell.

(The Witness) I tried to stay away from the law.

Q. And how about the operations and construction, engineering, do you undertake to express any opinion, do you offer your opinion as an expert on railway costs as distinguished from records of those matters on the books? A. No, I don't think I have tried to inject that into it at all.

Q. You haven't undertaken to testify either as to facts or as to opinions on operations or results except insofar as they are reflected in the books? A. I think that's correct.

Q. Now, for instance, in your Ex. No. 46, which is the large exhibit that you filed you have there the Commission's valuation of 70 million dollars? A. Yes, sir.

Q. In 1924. And at the very beginning you deduct from the Commission's valuation, the sum of $90,000 for grants in aid of construction. That's your idea of proper accounting, is it? A. Yes sir, it's arriving at a rate base.

Q. You say in arriving at a rate base. What do you mean? Do you mean that is the proper method of accounting, or the proper method of arriving at a rate base? A. I think one covers the other.

Q. Don't you know the rules of accounting having nothing whatever to do with arriving at rate bases? A. I don't know about that.

(Mr. Tingley) Are you asking as an accountant or as a lawyer?

(Mr. Markell) Asking as a lawyer, but asking him as an accountant.

(The Witness) I think the matter of accountancy has a lot to do with fixing rate bases.

Q. It has a lot to do with fixing rate bases, but I will ask you the question again. Is there a single rule in the system of accounting prescribed by this Commission that prescribes how to determine rate bases? A. I know of none, no.

Q. Then in this deduction of $90,000 you have in mind the accounting problem, or did you have in mind to correct the Commission's decision as to the value of this Company's property for rate making?

(Commissioner Harper) Mr. Markell, I think after he states his reasons from the standpoint of accounting, it's a matter of argument then as to how far it should effect the rate base.

(Mr. Markell) It's a matter of argument if he states his goal from the accountant's point of view.

(The Witness) I have stated that.

Q. You think that is proper accounting? A. Yes, sir. Something that is paid for by another party, it seems to me, is not a part of a rate base upon which a Company should be allowed to earn.

Q. But that isn't your opinion as an accountant. That's you opinion as to rate making, isn't it? A. I don't see how I can divorce my opinion. Half of my mind is accounting and half is rate base.

Q. But you have just stated there isn't a rule in the system of accounts that tells how to determine rate bases? A. In the Commission's classification, no.

(Mr. Tingley) Q. Does the Commission's classification of accounts exhaust the entire field of accounting?

(The Witness) I was just going to say no, that it does not.

Q. But so far as the Commission's classification of accounts goes it doesn't deal with that subject? A. It doesn't deal in rate making at all.

Q. So this $90,000 represents property. It's part of the $70,000,000 isn't it? A. Yes sir.

Q. It's part of this Company's property? A. Yes sir.

Q. In 1924? A. Yes sir.

Q. And the Commission found that it was part of it? A. Yes sir.

Q. But it is your opinion that the Company should not be allowed to earn on that? A. That's correct.

Q. All right. Now let's pass from the law now to operations. On the same page of that exhibit, you have an item there, "cost of removing retired property." A. Yes sir.

Q. And you have $136,000 for 1924 and $149,000 and some odd dollars for 1925, and $96,000 for 1926 and $49,000 for 1927. Now that figure in each case is 20% of the total gross cost of track reconstruction, isn't it? A. Yes sir.

Q. Now you didn't find that allocation of that figure anywhere on the Company's books, did you? A. No, I think I stated that it was very impracticable to find just what that amount is and I think I explained that in order to find that amount a study has to be made of a number of representative jobs in order to find out on the average what it should be.

Q. But you didn't find on any job any differentiation, any cost of moving the old track and cost of new construction? A. No, I said it was impracticable to find it, because the same group of men will tear out the track and build it up.

Q. You haven't any experience in cost of track work, have you? A. I have had considerable experience in track accounting and construction accounting, yes.

Q. Did you ever know of any accounting where there was a separate record kept of the cost of taking up the old track and the cost of laying the new? A. Yes sir.

Q. Where? A. Yes sir, you will find that most of the railroad companies, speaking now of steam railroads always allocate a certain amount of the labor of a new job to the tearing out process.

Q. Don't you remember the testimony in this case, that the salvage on this reconstruction work was just

about enough to pay the cost of taking it out? A. I heard that, but I think the facts don't quite prove that. I think the fact is that it costs more to tear it out than the salvage received.

Q. Don't you know, as a matter of fact that it doesn't cost any more; that the cost of tearing out track is practically nothing at all. A. I certainly don't. I think anyone that can see a gang working will see that it takes almost as long to tear out the tracks as it does in the rebuilding process.

Q. Don't you know that it takes them practically no longer and no more expense to tearing a track out of the ground than it does to dig up the ground to lay a new track? A. No sir, I think it takes longer to tear out the paving and all that sort of stuff to get down to the ties, for instance. It takes as much of that labor as it does to build up the track again.

Q. It takes as much labor—— A. To tear out as it does to build up on track work.

Q. You know it takes labor to dig up a street to lay a new track, don't you? A. Oh yes.

Q. Don't you know it doesn't take any more labor appreciably to dig up a new street than to—— A. I am not discussing that at all. I am discussing track renewals where it has to be dug out to be built up, and it takes as much labor to tear out as it does to build it up.

Q. But don't you know that the cost of digging up a street is part of cost of laying a new track. A. Oh yes, that's exactly what I say; that the cost of tearing it out, digging up that street is almost as much, as a matter of fact it is as much as the rebuilding of that track.

Q. But don't you know that the cost of digging up the street is a part of the cost of the new track, just as this Company has always charged it on its books? A. I wouldn't say so, no.

Q. What is it then? A. It's the cost of tearing out the old, and should be charged against the depreciation reserve.

Q. Against depreciation reserve? A. Yes sir.

Q. The Company never had enough depreciation reserve to cover that? A. That's not my fault. It should have been provided for in the accounts of the Company since its beginning.

Q. Then you mean, Mr. Nodder, by that that if you are valuing a tract at cost reproduction that the track which is laid on a new road you would include not only the cost of laying the track, but the cost of digging up the road, wouldn't you? A. On new work?

Q. On new work? A. Yes sir. Grading the road, I would charge as new work.

Q. So that if you laid new tracks in a road where there has been no track at all before, and it costs $1,582,000 to do that work, of which $136,000 was the cost of digging up the street, the whole $1,582,000 would be the construction cost of that new track? A. Yes sir, of new work.

Q. But if you had a track already in the road, which had cost that $1,582,000 and it wore out, and you laid a new one then when you determined the capital cost of that new track, the new track would be the same kind of track, built at the same cost, we will assume that there has been no change in the price level, you would build the new track at the same place, at the same cost, same track in every respect, but the capital value of that new track would be $136,000 less? A. I don't think you would have the same conditions. You wouldn't have track there in the first place that has to be torn out.

Q. I am just asking you the results. I am not asking you the reason for it. A. Ask that question again, it's too long for me.

Q. Let me repeat it again. I don't want reasons, I just want facts.

Then do I correctly understand you as follows:

If a track is laid in a street where there is no previous track in existence, and the construction of that track, including the digging up of the street and laying the

track cost $1,500,000, of which $125,000 is the cost of digging up the street, the capital cost or value of that track would be $1,500,000 wouldn't it? A. That's correct, yes, on new track.

Q. Now then assume that a period of time passes, and that in this passage of time there is no change in price levels or costs of any kind, and that that track is replaced, and in replacing that track it again costs $1,500,000 to take up the old track and lay down the new, and that includes $150,000 for digging up the street, and the old track and $1,350,000 for the rest of the work, and you testify that that second track, the capital value of that would only be $1,350,000? A. If the price levels are the same, I think you will find that the classification provides that where track is retired and replaced in kind, that the cost of putting in the new should be capitalized and the old retired.

Q. So that in the instance I gave the new would be capitalized at $1,350,000? A. The new would be capitalized and the tearing out would not.

Q. It would be $1,350,000, then in that instance? A. Yes.

(The Chairman) You say the classification retires that?

(The Witness) The classification says where property is replaced, retired and replaced, that the old shall be written out and the old put in, the cost of the new, now to get down to the cost of the new, you have got to tear out the old and tearing out the old is the cost of moving it. Operating expenses that's where is belongs, according to the classification.

Q. And the depreciation reserve should be more equated to cover that? A. I merely spoke of depreciation in connection with your Company. Our classification says those expenses shall be charged to operating expenses. As a matter of fact on account of the fact that you never accrued depreciation prior to 1912, your whole method of handling retirements and depreciation is incorrect from an accounting standpoint and from the standpoint of the Commission's classification.

Q. Now, Mr. Nodder, you said a moment ago, I don't care which is which, I just want to know you said first that that should be charged to depreciation reserve, and now you say it should be charged directly to operating expenses. A. From the Commission's classification it should be charged to operating expenses, because that's the method that you people over there have been following.

Q. But we have never had rates enough to charge to operating expenses or provisions for depreciation enough to charge it to that. A. That's because you haven't asked for them, or perhaps the situation has been such that the rate you might have asked for might have been exorbitant. You just haven't charged it.

Q. At any rate, we haven't charged it to operating expenses and we haven't had depreciation reserve enough to cover these things. They have been charged to capital, haven't they? A. Partly.

Q. Well, the whole of this has been charged to capital? A. All of this, yes. On your books tho you have taken out part of that.

Q. For original cost? A. For original cost.

Q. Yes, but so far as this cost of digging up is concerned, that's all included in part of our book cost? A. About half of it is charged in capital.

Q. But all of this you have been speaking about? A. All of this yes, but on your books you take about half of that in computing your estimated original cost.

Q. But all of this has been charged to capital on our books, this 136? A. Part of it, I say that for this reason, that the method of writing out your original cost is to work this total by a series of factors, of labor and material increases, in order to arrive at an estimated original cost, and it is approximately 50-50, so that half of it is charged into fixed capital.

Q. But the 136 is divided between fixed capital and depreciation reserve just as the $1,582,000 is divided? A. That's correct.

Q. Now, Mr. Nodder, will you turn to Ex. No. 40, People's Counsel Ex. No. 40.

(Mr. Tingley) He didn't put that in.

(Mr. Markell) I know he didn't.

Q. (By Mr. Markell) You are familiar with these exhibits of Mr. Wolf, aren't you? A. I have listened to Mr. Wolf putting them in.

Q. You and he corroborated in preparing them? A. Some of them. Yes. Not on No. 40.

Q. No. 40 has an item there, book additions, that is obviously an accounting matter. You are able to testify as to the correctness of that, aren't you?

(Mr. Tingley) If the Commission considers it cross examination to examine a witness on an exhibit he didn't put in, all right.

(Mr. Markell) It's an accounting matter. He has covered the whole of the Company's accounting accounts.

Q. (By Mr. Markell) Is that a correct figure? A. I don't know how that figure is made up.

(Mr. Tingley) It isn't cross examination to ask a witness about an exhibit that he didn't put in.

(The Witness) I think Mr. Wolf can well answer that.

(Mr. Markell) I think the field on cross examination is very wide.

(The Chairman) Didn't Mr. Wolf testify that Mr. Nodder assisted him on certain of these exhibits?

(Mr. Tingley) On certain ones. Mr. Nodder didn't assist him on this one.

(Commissioner Harper) I should think you would have to make him your own witness.

Q. Mr. Nodder, your own exhibit No. 46, which contains some 30 pages, does show not only the retirements at valuation figures, but it purports to show book figures, doesn't it? A. Yes, sir.

Q. Well, can you tell me from your own work, if you

don't know the correctness of Mr. Wolf, will you tell me what the amount of the book additions of this Company's property were from the 31st of December, 1923, to the 31st of December, 1926? The net book additions? A. I can tell you that very readily from Ex. No. 52, my balance sheet, by taking the amount of $90,394,877.14 and deduct from that $88,571,841.34.

Q. You are taking December, 1926? A. Yes, sir, that's the date you spoke of.

Q. The figure I have is ninety-six million? A. 90 million.

Q. Oh, yes, I see. $90,394,877.14. A. And deduct from that the balance December 31, 1923, will give you $88,-571,841.34, or a difference of $1,823,000 in round figures.

Q. Now, Mr. Nodder, you don't mean that that is the correct net amount of book additions as compared with the valuation? A. That's your book additions in the road and equipment accounts. Now there are certain other additions. For instance, on the same balance sheet, deferred assets, improvement to property, there is about $100,000 additional right there. Under deferred assets, payment of 10% on account of equipment purchased there is something in there.

Just where it shows on this balance sheets I can't say, but there is on the Maryland Electric—well, that is the total of the book additions that I have just spoken of.

Q. Now, Mr. Nodder, aren't there some adjustment of property that was in the valuation of January 1, 1924, that didn't get on the books either on the asset or the write-off side? A. Yes, sir, there are some.

Q. You haven't made those? A. If you take my exhibit No. 46 and take sheet No. 2 for 1924, take the end of the figures in the column "not in valuation," under "additions," and subtract from that the retirements under the column "book figures" that will give you net additions for 1924.

If you do the same thing on Sheet No. 12 for 1925 and Sheet No. 25 for 1926 and add those three together you will get the net book additions.

Q. I tried to do that and I couldn't find the figures checked with anything else in the case. A. Those are the figures.

Q. Aren't there transfer figures in both of those cases? A. There are some, yes, some transfer from Maryland Electric to the United.

Q. You have the figure on Sheet No. 2, there is $440,000 transferred? A. That's correct.

Q. You don't mean that would be deducted to you? You say, net book additions? A. No, that would have to be taken into consideration. I will have to go over this very carefully to give you an exact figure.

Q. What would be the figure there for 1924? Would that 440 be the only one you would deduct from this million 824 below? A. In 1924 you have to take the difference between $1,824,000, the net additions in the first column.

Q. Yes. A. And take from it the first two items in the "In valuation" column $12,082.11.

Q. Yes. A. I think that will give you a net addition for that year of $1,812,790.70. The items there in the "In valuation" column of $489,845.55 for Maryland Electric cars gives the amount that is shown down under retirements of $440,861, plus the 10% that is carried in suspense on the United's books.

Q. I. see. Now then turn to the next sheet No. 12. You have there net book additions $689,000. What deduction would you have to make from that? A. Take out that $27,080, the amount in the "In valuation" column.

Q. So that would give you $662,021.39? A. That's correct.

Q. And then the next page is page 19, I believe, what would you get there? What change would you make there? A. I would have used the net additions, which happens to be a red figure.

Q. You would use that without change? A. Yes.

Q. So that for the three years computed in this way, you would have net book additions of about $1,800,000? A. That's correct.

Q. Do you think those are the only adjustments that are necessary? I don't know, I am only asking for information? A. Those are the only book adjustments that are necessary, but I have corrected those retirements to valuation figures.

Q. Yes, I am speaking of the book figures now? A. Book figures, I think that's all.

Q. You think the figure on Mr. Wolf's exhibit No. 40, which is the same as Company's Ex. No. 6, $2,545,000 is correct? A. From the figure we have here, it seems to be.

Q. Did you compare your figures with the Company's Exhibit No. 6? A. I have not.

Q. You don't know whether the Company's adjustment there is correct or incorrect. A. Right now, I don't. I would have to give it some study.

Q. Now, in arriving at these book additions, that we have now roughly $1,800,000, those don't involve any change in this item of retired property does it? That includes them or excludes them? A. That does not include adjustments for them for valuation figures. It includes retirements at back figures.

Q. That includes the reconstruction of tracks as it's now carried on the books without the change you have made? A. That's correct.

Q. I see. Now the result however, is that the book additions for those three years amount to roughly $1,800,000? A. That's correct.

Q. So that if you would add to the value of the property that the company had on the first of January 1924, $70,000,000 as found by the Commission, exclusive of easements, of course you would have had if the book additions could be added to the physical value of 1924, that would have made the value at the end of 1926, $71,800,000. A. That's correct.

Q. But when we turn to your Ex. No. 46 of sheet 1, we find that when you make the additions at actual cost in that way you compute actual cost and make retirements at valuation figures, we arrive at a figure of $70,640,000. A. That's right.

Q. So that in the course of those three years, therefore according to your figures, the Company has lost $1,200,000 in actual value of property as compared with its book additions? A. That shows on the face of the exhibit, yes, sir.

Q. Don't you think those book additions are correctly made? A. The book additions of the one million eight, with the exception of that cost of removal of property, I think are correctly made.

Q. Yes, and the difference between retiring property at valuation cost and at book cost results in this difference of —— A. That plus the cost of removal amounts to $1,200,000.

Q. And that shrinkage between the difference in cost and value is something that the Company would just lose according to your theory, would it not? A. It would lose it because it gains it in the valuation, it seems to me.

Q. So that altho the Commission said the Company had that property and it belonged to it and it was entitled to a return on it, it would gradually lose that? A. If it doesn't have it any more it can't earn a return on that.

Q. It gradually loses it as its retired? A. That's proper and natural.

Q. It doesn't get out of income any allowance to compensate it for the value of the property it loses? A. It gets a depreciation allowance.

Q. But the depreciation allowance falls $1,200,000 short in three years. I mean on your own theory. If the depreciation allowance were sufficient—— A. The depreciation allowance over three years has amounted to something like $2,400,000.

Q. We will come to the depreciation allowance in a moment. The depreciation allowance according to your theory would not be entitled to take up that difference

between cost and value? The Company would just lose that as it goes along? A. The loss in the value there it seems to me is $1,200,000.

Q. Yes. A. The depreciation that has been set up is $2,500,000, therefore the Company has set up practically twice as much as it has lost in property.

Q. We are not talking about that, the $2,500,000 is to cover all the depreciation, including the cost price, that's been written off, isn't it? A. The cost price, yes.

Q. Now what we are talking about now, is something over and above cost price, and you tell the Commission that the Company's depreciation allowance should not be entitled or fixed so as to make any provision for that one million two, isn't that correct? A. That's right.

Q. That the depreciation allowance should be sufficient to retire cost? A. To retire cost.

Q. But the Company should lose that $1,200,000 as they go along? A. That's correct.

(Mr. Tingley) Sometimes it's a loss and sometimes it's a gain, isn't it.

(The Witness) May be either way.

Q. Well, I am glad to get your view of the loss.

(Mr. Tingley) We are glad to get yours, Mr. Markell.

(Mr. Markell) You will get it in the course of time.

(The Witness) If that's law, I am glad I am not a lawyer.

Q. Now, Mr. Nodder, in your exhibit No. 42, I believe it was, and you went over this Company's accounts, and some exhibits relating to those accounts, on the subject of depreciation, I believe? A. Yes, sir.

Q. And on the first sheet of this exhibit, you have the Company's charges to depreciation in various years. A. For the depreciation reserve, yes.

Q. Yes. That's retirements that were charged to that

reserve? A. That's the various charges, not all retirements.

Q. Yes. Well on the second sheet you distinguish between the charges and retirements, don't you? A. Yes, sir.

Q. On the second sheet you eliminate from the total, you first make some additions to retirements that didn't come out of depreciation reserve, and then you make some deductions that were taken out of depreciation reserve? A. Yes, sir.

Q. And one of those deductions is that item of Pratt Street Power House, isn't it, $1,252,000? A. That's right.

Q. And on the other side you show retirements of about a million and a half dollars that didn't come out of depreciation reserve, partly been taken out of profit and loss and partly still in suspense, that's correct, isn't it? A. That's right.

Q. That includes the $898,000 item up there. That represented some three hundred cars that were burnt up in 1926? A. A large part of it represented those cars.

Q. Those cars the Company got no allowance for in the valuation, did they? A. I don't think so.

Q. And they stood on the books without being written off out of depreciation reserve all those years, didn't they? A. That's right.

Q. And not having any reserve to write them out of, they put them in suspense in 1926? A. They had reserve but I presume they figured it wasn't adequate to cover all of those.

Q. Now, on the third page of this same exhibit you show three items of so-called retirements, you mean by that, of course, book retirements, don't you? A. Yes, sir.

Q. Out of depreciation reserve? A. Yes, sir.

Q. And that's $8,705,000 the third list under retirements from 1912 to 1926, is the amount that is shown in

the next to the last column on sheet No. 2, isn't it? A. That is correct.

Q. In other words, that is arrived at by taking the total charges of depreciation reserve of $9,000,000 in those 15 years, adding a million and a half that were retired thru suspense and profit and loss and then eliminating this one and a quarter for the Pratt Street Power house sale and about $600,000 of other items? A. That's right.

Q. To get that $8,705,000? A. That's right.

Q. So that those are the only retirements of property that were actually on the books for that period, weren't they? A. That were actually retired on the books, yes, sir.

Q. Now of course, you don't mean to suggest that that was all the property that the Company really retired in those years, do you? A. If that accounting system of the Company means anything, that's all they retired. If it doesn't retire this property, then its accounting system is of no use.

Q. But you know as a matter of fact, don't you, Mr. Nodder, as this valuation case demonstrated to the Company's sorrow, that the Company in the long period of its existence had had many kinds of property in the various changes that it had gone thru, particularly cars, that it would find itself with cars that had gone out of use and that it had no further use for, that practically weren't taken off the books at all, but when the valuation came the Company got no credit for it, that's a fact, isn't it? A. I know in the valuation they got no credit for it unless they were used and useful. Whether they were on the books, I don't know.

Q. You know as a matter of fact that there is a very large amount of cars and other property that naturally went out of use that they didn't get any credit for that are not included in that $8,705,000, don't you? A. I don't know that.

Q. Don't you know it about the $2,400,000 before that? A. I don't know. There may have been cars retired dur-

ing that period. I can't go back now and reconstruct those accounts.

Q. You are merely taking the facts of the accounts? A. Yes, sir.

Q. And if the facts of the accounts are accurate, your conclusions would be accurate? A. That's correct.

Q. And if the facts of the accounts were inaccurate your conclusions would be inaccurate? A. That's correct.

Q. You weren't connected with the Commission at the time of the valuation case, were you? A. No, sir.

Q. And you haven't studied the record and the briefs in that case? A. Not in detail. It would take me a year to do it.

Q. And you don't know that the Company had, as a matter of fact, and had before that valuation, a great many millions of dollars of property that had not been written off the books that were excluded from the valuation? A. I don't know that. I know a lot of property was excluded from the valuation. The particular instance I know of is this item of cars that you spoke of. They are excluded from the valuation, but they were not written off until later.

Q. Let's turn to the last sheet in the same exhibit. You do know from that exhibit that there was as much as $8,000,000 of old property that antedated the electric system in the consolidation, don't you? A. That's what I understand from People's Council Ex. No. 13 in that case.

Q. Did you study that exhibit of People's Counsel No. 13? A. I looked it over, yes.

Q. Do you know how it was prepared? A. Yes, sir.

Q. What is the basis of it? A. It's based, as I understand it on an appraisal made in 1914 by Stone & Webster from which was written back additions and retirements.

Q. So that it isn't, as the Commission might have

gathered from your testimony, it isn't based on any figure that begins in 1899; it is based on a figure that begins in 1913 and goes back? A. That's correct. As a matter of fact, I think I brought out in my direct testimony, that the book figure around 1899 was something like 58 or 59 million dollars. If I didn't I should have done it and I intended to do that.

Q. Do you understand the figures in this middle column to represent cost or value? A. They represent a value written back, that is a value as of 1914, written back to 1899, by the deductions of retirements and additional capital put in.

Q. So they don't there represent either present cost of reproduction or original cost? A. That's correct.

Q. And the Commission said, in its opinion, that it's impossible for the Commission to ascertain what is usually known as the original cost of property? A. That is correct, and that's the reason I specifically stated that this exhibit was based on People's Counsel Exhibit Number 13 in the previous valuation case.

Q. The Company didn't offer this exhibit? A. No, sir. People's Counsel Exhibit No. 13.

Q. And it doesn't represent original cost nor does it represent present cost of reproduction, does it? A. I guess that's about the term that should be used. In other words, the figures of 1914 were considered fairly representative of what the costs were back there.

Q. Now you spoke of Stone and Webster. Don't you recall that the only thing Stone and Webster had to do with this was that they had prepared the inventory? A. For the Company, yes, sir.

Q. But the prices were put in there by Mr. Feustel and his assistant, Mr. Black? A. I don't know that.

Q. Don't you know that? A. No, sir.

Q. You don't mean to say that the Company made these prices or any of them? A. I took this purely from People's Counsel Ex. No. 13, and People's Counsel in

that case explained that that was his method of arriving at the cost.

Q. You took that for whatever it might be? A. For whatever it might be worth. Now as a matter of fact if the costs were higher or if I had used that first column, for instance, the average fixed capital as stated in that exhibit without deducting the eight million dollars the results would have been so much higher.

Q. I am not talking about the results. I want to get at the method. A. The method is simply stated in the exhibit, but it was taken from People's Counsel Exhibit No. 13 in Case No. 1533.

Q. I thought that was it, so that what these figures really represent, they neither start with the value in 1899, nor do they go back from the present value of 1923 or '27, but they are a mixture of cost of reproduction in 1913 with an attempt to carry that back from book costs and retirements, is it not? A. That is correct.

Q. And with an attempt to carry forward with book costs and retirements from 1913 to date? A. That is correct.

(Mr. Tingley) Do you know whether the Company did or did not claim that the figure ought to be materially higher?

(The Witness) Yes, sir. The opinion of the Commission so stated.

Q. But that is the way in which the thing was carried forward and backward? A. That is correct.

Q. And of course every figure, there, except the figure for 1913 therefore reflects any inaccuracy or imperfection in the Company's books, both forward and backward? A. Yes, sir. I think if you take the object of this particular exhibit that these other points will have no value. In other words, the idea is this: that if a 4% depreciation had been accrued you can take any base you wish, you can take the present valuation and work it backwards, or if you have the figures after the valuation of 1899, and work it forward, the fact remains if you take four percent of that property value or cost, or

whatever you like, you will have a terribly high depreciation reserve. The figures will work approximately the same way whichever way you work it.

Q. You don't mean to say that any figures will work out the same result? A. Not the same result, but the proportionate result will be approximately the same.

Q. Approximately the same as what? A. As this, which shows a depreciation reserve of something like 60% of the costs shown in this second column. Now if that second column were increased or decreased, the corresponding increase or decrease would be reflected in the last column.

Q. Of course, and if it were decreased enough the last column would vanish? A. If it would decrease to nothing, yes, which is ridiculous.

Q. And if it was multiplied by two, the last column would get up to 88 million? A. That is correct.

Q. So you could get any result at all in that third column according to the figures you used in that second column? A. That's correct, and I have used the lowest possible figure that I could find, to base facts on, that's why I deducted the eight million in the first place to come down to a starting point of twenty four million when the book figures in those days was fifty-eight or fifty-nine million dollars.

Q. But the Commission hasn't allowed the Company it's book figures? A. Absolutely not.

Q. And as you have already said, any property that the Company retired that was not retired on the books is not reflected in those figures? A. That is correct.

Q. Now let me ask you one more question about this exhibit. You say in the foot note here that the Company has superseded property amounting to $8,000,000 that ante-dated—— A. 1899.

Q. That ante-dated 1899? A. That is correct.

Q. Now don't you remember that the same exhibit, People's Counsel, claimed that there was already by 1913 there was already included in those figures $4,000,000 of

superseded property in the electric period? A. I don't recall that, no.

Q. You don't recall that? A. No.

Q. Would you recognize it if I showed you the exhibit? A. Yes, I would.

NOTE: Exhibit here handed to Witness.

(The Witness) (After examining exhibit in question) Yes, that's correct.

Q. Now that $4,000,000—that represents—— A. I might state, Mr. Markell, that the eight million dollars was used because in the Commission's opinion, that eight million dollar figure was quoted by the Commission. The Commission said, on page 19 of its opinion:

"The People's Counsel claimed that the actual value of property as of 1899 should be reduced by $8,000,000 because of superseded horse car and cable property, leaving $24,000,000 as the actual value of the physical property in 1899."

Q. That eight million dollars is not included in that $12,500,000 at the foot there, is it? A. No, it is not.

Q. And of course the four million dollars, I just called your attention to is not included there either, is it? A. No, sir.

Q. So that four million dollars, according to People's Counsel, represented four million dollars that had already becomes valueless and superseded by 1913? A. By 1913, yes, but was that property prior to 1899 or subsequent to it.

Q. The exhibit indicates that it was subsequent to it. Q. The eight million dollars applies prior to 1899. The Commission said that value at 1899 should be reduced by eight million dollars. The four million dollars, I don't know.

Q. You don't know anything about that? A. I don't know anything about that.

Q. And you don't know that in that same valuation case the People's Counsel referred to three or four mil-

lion dollars of cost, of cars and equipment which the Company still had, and which hadn't been written off on its books in addition to that four million, do you? A. I know it from your showing me that exhibit.

Q. But you don't know there was another three or four over and above the four million I just showed you? A. No, I don't.

Q. Now, without going into any more detail, as you say you have taken these figures on the facts from the books? A. Yes, sir.

Q. And of course it stands to reason that any retirements of property that the Company lost, that weren't taken off of the books don't appear in this $12,000,000? A. That is correct.

Q. And those retirements help to swell this balance of $32,000,000? A. Yes, sir.

Q. And in the same way of course, any change in the $44,000,000 would have the same effect? A. That is correct.

Q. So that both of these figures are simply you own computations? A. All that I had to take was as far as possible the book figures. If the books are incorrect of course I can't go back of them.

Q. Of course People's Counsel Exhibit wasn't a book figure, was it? A. No, that's right. But you were speaking of the $12,000,000.

Q. None of the figures in the second column of Sheet 4 are on our books, are they? A. Not in that form. The additions and deductions are on the books.

Q. But the base that you are building them on? A. The base is not, no.

Q. As a matter of fact, those figures in the second column, so far as they represent anything, purport to represent the entire physical property of this Company at this hybrid cost and value? A. I think that was the object of the People's Counsel in those days to present that figure.

Q. So they would include not only depreciable prop-

erty but also land and undepreciable property? A. That is correct.

Q. And they would also include overheads? A. If such had been charged.

Q. But what overheads there were they would have included? A. If any had been charged they would be included, yes.

Q. As a matter of fact that valuation as of 1913 was based on hypothetical cost of reproduction, wasn't it? A. Yes, but I believe that these figures that are shown here in this column do not include any of those overheads, that is, except purely construction overheads. I just don't know the form.

Q. Do you know that, Mr. Nodder? A. Let me see the exhibit and I will tell you.

Q. Don't you find down here $1,700,000 cost of financing? A. You are starting with $36,000,000. I start out with $32,000,000.

Q. The $32,000,000 is arrived at by taking off this $4,000,000 on the next page, isn't it? A. No.

Q. This $36,000,000 is 1913? A. That's correct.

Q. Plus the $4,000,000 that you left here? A. Yes.

Q. So this does include overheads? A. It does include some overheads, yes.

Q. It would include all the overheads that were included in that valuation? A. Yes, but not the valuation as put out by the Commission. It only includes as I understand you there cost of financing.

Q. Now nobody has testified on behalf of the Company in this case, as you understand, that the Company claims that they should get an allowance of 4% on the total value of their property including overheads and non-depreciable property, have they? A. No, I don't think they have. They have testified though that they should get 4% on depreciable property at valuation prices.

NOTE: Answer of witness here reread by Reporter.

Q. Mr. Nodder, you filed an exhibit this morning that showed the average interest rates of securities authorized by the Public Service Commission in recent years? A. Yes. Number 51.

Q. Did you segregate the figures for street railways? A. No.

Q. You don't know what they would show? A. No, I do not. I have those figures and can work them up for you if you wish.

Q. Mr. Nodder, on your Exhibit No. 49 you showed the nominal interest rate on this Company's present outstanding bonds? A. The average interest rate.

Q. The average nominal interest rate? A. Yes, sir.

Q. Of course you know perfectly well the effective rate of those bonds is nowhere like the nominal rate?

(Mr. Tingley) What do you mean by the effective rate?

(Mr. Markell) I mean the rate on the basis of what they sell for. The actual yield.

(Mr. Tingley) At the present time, you mean?

(The Witness) I just haven't looked up any quotation on that, but I suppose that the selling price is slightly less than par.

Q. Well, you have the income bonds there at 4%. The slightly less than par there is 49% less, isn't it? A. I just don't know. It's readily obtainable.

Q. And you have there the first 4's at 4%, and don't you know that they are selling on practically a 6 per cent basis? A. They are now and since the conversion of certain of them to six per cent they sell on the same basis as the six per cent bonds.

Q. And the 6 per cent. bonds are below par, aren't they? A. I don't know.

Q. Do you know of any securities of this Company other than bank paper that have been sold on better than

a 6 per cent basis in the last five years? A. No, I don't. The only thing is that this is what the Company is actually paying in interest. This is the average rate that this Company is having to pay out on a par value of its securities.

Q. On a par value. But not on the money it gets. A. As far as the Company is concerned it doesn't matter what the market is on these securities. Right now it still only pays 4¾ per cent.

Q. But the Company can't get any money permanently to finance that 4¾ per cent.? A. I don't believe it would.

Q. It never has. A. Well, some of these things show 4 per cent. I don't know what those first consolidated mortgages sold for originally. I have no record of that.

Q. Well, they are not in your time. A. Not in my time. Not with the Commission anyway.

(Mr. Markell) The witness is with you.

RE-DIRECT EXAMINATION.

By Mr. Tingley:

Q. I have no questions unless you want to add something to your testimony on cross examination, Mr. Nodder. A. It seems to me in connection with this depreciation I might just add that as far as the records of the Company are concerned the average retirements during the sixteen years practically that is shown by my exhibit Number 42 have only been about $555,000 a year as against a credit to the depreciation reserve and a charge to expenses of over $800,000 a year, and I think in spite of any question of some of these figures it's very obvious that if 4 per cent had been set up on the fixed capital, no matter whether we use a hybrid fixed capital or whether we use the valuation taken back or any other basis, the 4 per cent. depreciation would show a figure very, very considerably in excess of actual facts as far as depreciation is concerned.

RE-CROSS EXAMINATION.

By Mr. Markell:

Q. Now, Mr. Nodder, just one moment there. Those figures that you used in that exhibit are based on cost of reproduction in 1913 value, aren't they? A. I understand that People's Counsel Exhibit No. 13 is, yes.

Q. So that from 1913 back every one of these figures, if they are right, represent the full value of all the Company's property depreciable and non-depreciable and overheads, don't they? A. That's correct.

Q. And the further you get back, even 1913 value was higher than cost, wasn't it? A. I don't know that.

Q. You know as a matter of fact that the price trend, the price level was at the bottom in 1897 don't you and was steadily going up? A. I think it's been testified in this case that prices have changed very, very slightly from 1899 until 1914.

Q. Don't you know as a matter of fact that the price level in 1899 was about one-third less than 1913? A. I do not. I don't think that's true.

Q. You don't know that in 1897 the price level reached the low point for all time? A. It was very low down there.

Q. If the price level in 1899 was one third less than in 1913 then all of these figures back from 1913 were progressively above cost? A. I don't agree that it was.

Q. I say it is was. A. If it was, yes.

Q. And regardless of whether it was or not everyone of these figures from 1913 back included, if they were correct, the full value of overheads and non-depreciable property? A. That is correct.

Q. Now just one other question that I overlooked. Now in your exhibt No. 46 you have on Sheet No. 2, when you have retired property at the Commission value, you have added the gross additions including replacements and you have deducted the full Commission value including overheads, haven't you? A. That's correct.

Q. Don't you know that in the Commission's valuation case that the valuation was based on the theory that depreciation is contributed only to the base figure; that the whole amount of depreciation is taken up in the base and the overheads are treated as non-depreciable? A. Wait a moment. Depreciated figures that are shown on sheet No. 2 of $649,000 which are taken from Sheet No. 11 are depreciated figures, and the percentage of depreciation that has been used is the percentage of depreciation that strictly physical property had applied to it the Commission's valuation. In other words, I have only used the depreciation on that figure that the percentage of depreciable property bore to the depreciation allowed by the Commission.

Q. I realize you have done that and we don't take that off. We don't think we are entitled to that. A. I did it for you.

Q. But we do feel that there is no justification for depreciating the overheads without putting in a similar figure for overheads on the additions. A. I have deducted the overheads that applied to that particular property on a percentage basis, but the overheads that have been charged by the Company since 1923 have been included in the gross figures of additions.

Q. Yes, but in the Company's exhibits there were no overheads allowed on either side. A. That is correct.

Q. Then the effect of your change would be in this particular case, if the Company's overheads would happen to be small, and the cost didn't include those items that you want to write off, the effect of that would be when the Company has property which the Company values at a million dollars base figure with $220,000 of overheads, in the course of these three years that million dollars of property is retired and it's replaced by exactly the same kind of property at exactly the same cost, and the result is that there is $1,220,000 deducted from the value of the Company's property, and it is only a million and some trifling addition added on to take its place, isn't that correct? A. That's correct if the trifling addition you speak of, that is the overhead now used

by the Company is trifling. It's something over 22 per cent.

Q. But we have the same property, the same value, the same reproduction value, and this $220,000 has evaporated, is that right? A. No, because the overheads heretofore being charged by the Company are something.

Q. But they are not anything like the $220,000. A. They are not quite as large, but they are 22 per cent. overhead. Your overheads would cover actual overheads with construction work. They do not cover a lot of items which are considered in making a valuation. In other words, the basis of those overheads of making a valuation are not the same as the current overheads. If the Commission would value our property today do you mean to say they would allow us less than 22 per cent.? A. I don't know what they would allow.

Q. Your theory of this thing amounts to this, Mr. Nodder. You say here is our valuation of $70,000,000, and if a million dollars of that property goes out and another million dollars goes in we have exactly the same property, and because you take that isolated job and you don't find the same amount of overheads we lose the balance, is that right, in value? A. I took the $70,000,000 which included overheads and anything which was retired that had an overhead attached to it. In other words, I took out the portion that is retired out of the $70,000,000 and then any additions that are put in are added to that net amount. We start out with $70,000,000's of dollars which is the physical property plus overheads. If the physical property is taken out the overheads follow the physical property and are taken out.

Q. That wasn't the Commission's theory in the valuation, was it? A. I don't know that the Commission expressed any theory in the valuation.

Q. When the Commission was depreciating property the Commission didn't depreciate overheads. A. That's true.

Q. But under your theory—— A. You take out the overheads, yes sir.

Q. We lose that much? A. You lose that much.

(Mr. Markell) That's all.

RE-DIRECT EXAMINATION.

By Mr. Tingley:

Q. Do you recall that the only criticism the Company made of People's Counsel Exhibit No. 13 in the valuation case was that the figures were too low? A. I have heard something to that effect, yes sir.

Q. In connection with Exhibit No. 49, you of course weren't concerned with the yield of the securities to the investor, were you? A. No sir, I was figuring on the amount of interest that the utilities would have to pay.

Q. The sole purpose of the exhibit was to show what rate of return the Company was entitled to? A. That is correct.

Q. And in that connection you considered what was important was not the yield to the investor, but the amount paid to the Company? A. That is correct.

(Mr. Tingley) That's all.

(The Chairman) Mr. Sobeloff, have you any questions to ask the witness?

(Mr. Sobeloff) No questions.

(The Chairman) Mr. Clark, have you any questions?

(Mr. Clark) I would like to ask Mr. Nodder one or two questions on depreciation.

CROSS-EXAMINATION (Continued).

By Mr. Clark:

Q. Mr. Nodder, to what extent does the maintenance policy of a company bear on the retirement charges? A. I would say that a well maintained property would have have less retirements than a lesser well maintained prop-

erty. In other words, maintenance to a certain extent arrests retirements.

Q. Doesn't that account very largely in the policy of this Company for the ratio of depreciation charges to depreciable property? A. I believe that this Company, so it claims, has been very well maintained, and if that is a fact then its ratio of depreciation to depreciable property would be much less than perhaps would otherwise be encountered in a less well maintained property.

Q. In other words, the retirement period can be almost indefinitely deferred through a maintenance policy, that is, no postponement at all, an up-to-date maintenance policy, keeping every item of property in thorough condition.

Take for example the car matter that was referred to before noon. You can take a good car and assuming that that car isn't superseded by a more up-to-date car we will say, you can take a good car and repair and replace one part after another and extend the retirement period of that car way off into the future, can't you? A. That is correct, using your expression there if the car doesn't become inadequate. The two main features of depreciation to study are the matter of wear and tear and the matter of obsolescence or inadequacy. As far as the first part, wear and tear, theoretically the life of a car would be indefinite. It could be extended forever.

(Mr. Toole) One hundred and one years?

(The Witness) One hundred or more.

Q. Do you know the extent of the application of the rule that when a job costs less than a thousand dollars it is charged to maintenance? A. I don't know of such a rule?

(Mr. Tingley) That's a company practice.

Q. You don't know the company practice on that, do you? A. No. I am not just definite on that thing.

Q. You don't know whether it is limited to track reconstruction? A. No, I don't. That's my understanding.

(Mr. Tingley) I think it is, isn't it, Mr. Emmons?

(Mr. Emmons) Yes. If we have a large renewal of things such as maintenance, such as ties on open track work, that's purely maintenance, but anything where we have to dig up a certain piece of work that's all in one place that is over a thousand dollars then we take that out of depreciation.

(The Witness) That was my understanding.

Q. Have you had occasion to compare the maintenance charges of this Company with comparable companies? A. I have not.

Q. Have you investigated the maintenance charges of this company with respect to the liberality of those charges? A. Studies have been made as to the not liberality but as to the correctness from an accounting standpoint of a lot of those maintenance charges and have been found correct in general.

RE-CROSS-EXAMINATION.

By Mr. Markell:

Q. Don't you know that the maintenance charges of this Company are low as compared with other companies? A. I believe they are. One of the exhibits in this case the scale was very low on maintenance charges.

Q. So the less you charge for maintenance the more you need for retirement charges, isn't that true? A. If that is on a proportionate basis. The fact that the maintenance may be less compared with another company doesn't necessarily mean that this property is not maintained. The maintenance costs are less than in another city. No two cities are comparable.

Q. You don't differ with Mr. Nash in your view that accounting as between maintenance and depreciation is a twilight zone between them? A. There is a certain twilight zone to speak of.

Q. So the less cost on a maintenance the more would have to go in a retirement reserve? A. That's right.

(Mr. Tingley) The Company has always maintained

that its property was maintained in a high state of condition.

(The Witness) That is correct.

Q. What do you think would be the present value, after being indefinitely maintained, as Mr. Clark suggests, of a first class 1890 horse car? A. It's present condition?

(Mr. Tingley) Is the Company operating any now Mr. Markell?

(The Witness) If it is considered an antique it would be considered very very valuable. From an operating standpoint not very valuable.

(Mr. Clark) But if you were still using it it would have been possible to have maintained it right up to this day.

(Mr. Markell) Of course, if we live in another world. That's the point.

(Mr. Clark) I saw some out here to the Iron Horse, I saw some very old conveyances out there very well maintained.

(Mr. Markell) They were very interesting, but they weren't producing any revenue.

(The Chairman) Mr. Toole, have you any questions?

(Mr. Toole) No sir.

(The Chairman) Senator Benson, have you any questions you wish to ask?

(Mr. Benson) No sir.

(Examination concluded.)

(The Chairman) Mr. Tingley, have you any other witnesses?

(Mr. Tingley) No other witnesses.

(Mr. Benson) I am ready to go ahead, Mr. Chairman.

Thereupon—

JOHN O. BENSON,

a witness of lawful age, produced on behalf of the patrons of the Number 3 car line, having first been duly sworn according to law, was examined and testified as follows:

DIRECT EXAMINATION.

By Mr. Carville D. Benson:

Q. State your name and residence? A. John Oregon Benson, Halethorpe, Maryland.

Q. John, what is your education and training? A. A public school training, Baltimore Polytechnic, and John Hopkins as mechanical engineer.

Q. What are you doing now? A. Working for the Benson-Link Realty Corporation as General Supervisor and salesman.

Q. Will you explain this exhibit C which I now offer in evidence?

NOTE: Map above referred to is here filed in evidence and marked Halethorpe Exhibit C.

(The Witness) This map is simply a large picture (indicating map hanging on wall). It's not the same as the exhibit. The exhibit is taken from the geological map and this is just a city map which shows the streets, but is enlarged for the purpose so you can see it.

Now that shows in concentric circles from the center of the City outward and the various terminuses, or rather the various ends of the one car fare as we go along. Here is the Catonsville, Ellicott City, Lorraine Cemetery, Woodlawn, Slade Avenue on the Pikesville line, Lakeside, York Road to Towson, there is the Hamilton Avenue that goes out to Taylor Avenue, the Overlea line, here is 45th Street on the Middle River, and we had to extend the map a little bit down here, that's Dundalk Junction, (indicating) and all of those are one fare.

Now this is the Halethorpe Junction at the end of its

two fare distance (indicating). As you see it falls between this zone (indicating) and this one which is between the five and six mile zone, in the same zone as four and two that terminate here (indicating), making six other car lines all of which in this zone are for one fare where we have two.

Now there are four one fare lines in the next zone out, and still one line out beyond that. Now the only line inside of ours is this 45th Street line which was extended to the point that they asked in 1924. It shows the City line on the old City line and the 1924 decision in which it was spoken about the fact that there was no extension to the east. We also said there was no extension to the southwest. You see the extension was out this way due west and due north, so that these folks in this last extension got an extension here of about two miles directly east, which of course to Dundalk Junction means more, and they got a long ride.

Now out our way the extension is just a shade over a mile from the old 1816 boundary. We got no extension in 1888, and we are placed in the same class as the Dundalk-Sparrows Point line, and it shows also the present city line with the car lines which are outside of it.

The Catonsville line is outside, the Lorraine is outside, the Woodlawn is outside, Lakeside, Taylor Avenue, Overlea and Dundalk Junction for the two lines that terminate, or rather the two fares that come out at that point (indicating).

(Mr. Benson) Now I have Exhibit D that I wish to offer in evidence.

NOTE: Blue print above referred to is here filed in evidence and marked, "Halethorpe Exhibit D."

Q. John, have you anything to say in explanation of Exhibit D? A. Exhibit D is the information taken off of Exhibit C and put in a tabular form. All of this is air line mileage from Baltimore and Charles Streets, and you see the lines, No. 3 Halethorpe line, No. 26 comes out to a little over five miles. Then follow that down, No. 23 to 45th Street one fare and falls short of

that by about half a mile. No. 14 goes to North Bend Road on Edmondson Avenue and falls short by an eighth of a mile. Now all of the remaining lines, No. 8, Nunnery Lane, No. 8 city line, Towson, No. 24, Dundalk Junction, No. 26, Dundalk Junction, No. 35 Lorraine Cemetery, No. 28 to Lakeside, No. 32 to Woodlawn, No. 15 to Overlea, No. 19 to Taylor Avenue and No. 5 to Slade Avenue, all of which are one fare lines and extend beyond the end of the Halethorpe line, which is a two fare line.

These mileages are scaled from the Maryland Geological map which is considered the most accurate map that we have use of.

Q. You might tell me who you got these charts up in conjunction with? A. Mr. Britcher of Sutton-Britcher & Co., Engineers, assisted in preparing all of these charts and maps and checking the distances, so I think you will find the distances just about as accurate as you can find them. We haven't found any mistakes. You might find some later, but I doubt it.

(Mr. Benson) I now offer in evidence Exhibit E.

NOTE: Blue print above referred to is here filed in evidence and marked, "Halethorpe Exhibit E."

Q. Will you take Exhibit E and make any comment or explanation about that? A. Exhibit E is still a further tabulation of Exhibit C. It shows the air line distance of the Halethorpe No. 3 line as 5.35; the No. 23, Middle River, is 4.60 miles; No. 14, Ellicott City 5.20; No. 8, Catonsville 5.35; No. 8, Towson 5.65; No. 24 River View 5.8; No. 26, Sparrows Point 5.8; No. 35, Hillsdale 5.9.

Q. You need not read all of those. A. They show the air line distances. The next group of three colmuns is the one fare distance from Baltimore and Charles Street compared with the total Halethorpe line two fare distance. That shows the excess mileage, the per cent. excess and the average per cent. excess.

Q. There are just two of those excesses that show less for one fare than we have for two? A. That's right, sir.

Q. And the general average of all the lines is 12% excess over—— A. Including the deductions for those lines which are less than ours and averaging the whole twelve lines our ride for two fares is 12% less than the average of twelve city lines for one fare.

Q. Tell me why you took the center of Charles and Baltimore Streets in air line for these charts? A. In studying over the 1924 decision in which Sparrows Point was granted an increase——

Q. And the Middle River? A. And Middle River the Commission selected the center of the city in their wording and said it was a discrimination to the section in that part of the city to only be able to ride about three miles from the center of the city for one fare when all the other lines could ride from five to eight miles, and in mentioning all the other lines they forgot us for some reason or other. We are trying to remedy that now.

(The Chairman) I might suggest we were considering the city limits at that time.

(Mr. Benson) It don't seem so, Mr. Commissioner.

(The Witness) You went out of the city limits.

(Mr. Benson) I now offer Exhibit F.

NOTE: Blue print above referred to is here filed in evidence and marked, "Halethorpe Exhibit F."

Q. The Commission also said something about industries down in that section in their decision? A. Yes, sir.

Q. Now will you make any comment you want to make on Exhibit F? A. In looking over the decision of the Commission we found that they had given thought to the fact that in that section of the city the industry was an important part and to get people down there was important to the industries and important to the city, and also that people living in the center of the city might hesitate to move there if they worked in town as far as Patterson Park, or if they lived near Patterson Park it would be two fares to ride out to the various industries, and we made a check of the city of the industries employing more than 100 people, and taking our own car

line, No. 3 car line, we find that we have 53 such industries that are served by that car line before the car reaches Baltimore and Howard Streets, that is, so that these people, if they live in our section, could come in and get off the car before they passed through the center of the city.

Now the same applies to us that applies down to Sparrows Point. We have lots of industries that are very close to us, the stockyards, Miller Safe, Montgomery Ward, and people hestitate to live out our way and pay two fares even though they can save quite a lot of time, and it would be a saving to the car company to get those people into work and collect their fare without carrying them through the whole of the city.

Now this list, I don't know whether it's necessary to read it, I doubt it, but the addresses are Redwood Street, Sharp Street and Camden Street, South Paca, Mt. Clare Shops and Scott Street and West Redwood. All of these streets I have taken as where a man would conveniently get off of a street car and walk a block or so in preference to taking a transfer even if it were available. That is, a convenient walk from this No. 3 car line.

(Mr. Benson) I now offer in evidence Exhibit G.

NOTE: Blue print above referred to is here filed in evidence and marked, "Halethorpe Exhibit G."

Q. Now will you explain this Exhibit G? Let me ask you first where did you get this data of a list of the business enterprises? A. We got this from the Chamber of Commerce. They gave us a list of the larger industries.

Now Exhibit G might have come before Exhibit F because it tells a little more about it. For instance, it divides the city up into four sections. We call the northeastern section as north of Baltimore and east of Charles Street; northwestern as north of Baltimore Street and west of Charles Street; southeastern as south of Baltimore Street and east of Charles Street, and southwestern as south of Baltimore Street and west of Charles Street. Now throwing each of these industries in their proper location, and also figuring the area of that par-

ticular location we find that the northeastern the area in square miles is 25.4 and the per cent. of which that is the total area of Baltimore is 28.1 per cent. Now we find 61 concerns in that district, and figuring a density proposition, dividing the number of concerns by the number of square miles in the area we find that their density is 2.4 concerns per square mile.

The northwestern is a little larger district, 29.1, it's 31.7% of the total area, and it has but 37 concerns, a very sparse manufacturing section, and its density is only 1.3.

Now the southeastern is a large section, it's 25.4, relative to the other three, its per cent. of the total is 27.7, and it has 107 concerns, the largest number of any of the four districts, and its density is 4.2.

Now our district, the southwestern, is the smallest in area of any. It is only 11.6 square miles. The per cent. of total area is 12½. It's less than one-half of any of the others. It's number of concerns is 77, next to the largest, and the number of concerns per square mile is 6.6, giving us the most dense manufacturing section of the city.

Now all of these concerns could be, or a good many of them, if people chose to live in the country, they could live in our direction and get to work easily and quickly and further develop that section.

Now in per cent. of the southeastern, which is the largest section, with 72% of the number of concerns that they have, we have 208% of the northwestern and 126% of the northeastern, and we also figure out from this Exhibit F chart that these 53 concerns, they are 69% of our number of concerns that are located in the southwestern section, and that they are conveniently served by the No. 3 car line or would be if they happened to ride on it.

Q. If they had one fare? A. If they had one fare out there a good many would ride, because I have tried to sell people houses and they say that even though to the Union Stockyards it's two fares, they prefer to live somewhere else where they can get a ride all the way

through the city and bother the trolley car company a little more for one fare.

(Mr. Howard) May I ask what the outer limit of these quadrants is? The inner boundaries are the vertical and horizontal lines through the center?

(The Witness) Yes.

(Mr. Howard) The outer boundary is what?

(The Witness) The city.

(Mr. Howard) Limits?

(The Witness) That is with the list we got went up to Oella and Towson, but we didn't think it was fair to throw in such places and we took the city as being able to check up. Sparrows Point is not in there.

(Mr. Benson) I now offer Exhibit H.

NOTE. Blue print above referred to is here filed in evidence and marked, "Halethorpe Exhibit H."

Q. Have you any explanation to make of this Exhibit H? A. The Exhibit H is further taken from Exhibit C. We took the air line distances and we also in this were governed a little bit by the fact that in 1924 an exhibit was introduced to show the comparative number of miles one rides per dollar. Now we didn't run it up to a dollar. We just take it for a mile and the rate of fare for the twelve city suburban car lines is 7½c, and their average distance air line from the center of the city is six miles, which gives them a ride per mile of a cent and a quarter, or $.0125.

Now the Halethorpe No. 3 line is 5.35 miles and the rate of fare is 15c, and it gives us a rate per mile of $.028.

I have two notes here that show that the 7½c fare is used where the twelve city lines are because 90% of the passengers use tokens, and down below I use the full 15c fare because I am told that 80% of the passengers use all tokens there, they don't use commutation tickets. If the rate were increased to 10c the rate per mile would be $.0167, whereas for the Halethorpe line it would be

$.0374. The average increase for the twelve city suburban car lines per mile is $.0041, less than half a cent, and the No. 3 increase per mile is $.0093, almost a whole cent.

Q. Per mile? A. Per mile.

Q. In other words, the Halethorpe line at present has doubled the fare that any other similar line has and now the proposition is to double the increase? A. That's it.

Q. How long have you been building and selling houses at Halethorpe, John? A. Since May, 1925.

Q. In your first transaction what name did you build under? A. Under the Northwest Halethorpe Corporation. We built on Carville Avenue 18 houses.

Q. Who was associated with you in that? A. My father and myself.

Q. You did all the work on that, didn't you? A. Yes sir, practically all the selling and supervising, buying of material and general foremen of the carpenters, too.

Q. Since then you are interested in the Benson Link Realty Corporation? A. Yes, sir.

Q. How much vacant land has the Benson Link Corporation available for development? A. They have 50 acres up at Leeds and about 15 down at Halethorpe. About 65 acres.

Q. How many houses have the Benson Link Corporation built since they started? When did they start? A. They started to build in 1926. They built 14 at Leeds and 14 at Halethorpe, 28 houses.

Q. How many unsold? A. 10.

Q. How long have they been ready for sale. A. They have ben ready since the late spring.

Q. All of them? A. Not all of them. Some of them are in various stages of construction, but most of them have been ready since late spring or middle summer.

Q. What effect if any has the so-called emergency rate case of the United Railways had upon the sales out in

our community? A. Before the rate case all spring we have been talking to various builders around and they were telling us how dead it was and how hard it was to sell, etc., but we were selling as we went along a few houses, and while it was tight and competition was tight we were still going ahead.

Since July, when the first notice came out about the two fares or the fare being increased to 10c, which would mean two 10c fares to us, we haven't sold any houses at Halethorpe and only one at Leeds, and people simply won't talk to us at all. They say it's too far out. We try to tell them it isn't far out; that our distance compares with all these other distances, but they say it's two fares and the two fares makes it far out. As one lady said to us it's two fares and it's bound to be eight miles and it can't be anything else. Well I showed her it wasn't five to Leeds, but two fares with that short distance they throw us into a class as if we belonged in the outer regions somewhere, and our distance and quickness to get down town doesn't count for anything.

Q. What effect does the two fares have upon the cost of a family at Halethorpe in the maintenance of their family budget as compared with the other locations where they have one car fare with which we are in competition? A. Take any point on any of those twelve lines where the people have one car fare. If there are two in the family on our line it just simply costs twice that ride back and forth, or only take one they have double the car fare, and at the 7½c rate for one person it means $45.00 a year. Now if there are two of them it means $90.00 a year and that would pay their ground rent if they didn't have to pay it for car fare where they can live some other place the same or a longer distance out without that and you see that we have to sell in competition with that, and the houses that we sell are good houses and we have to build a better house for the money all around. The houses that we sell against we don't think are as good as our houses and yet they bring better money and they sell quicker.

Q. Now what have you got to say as to whether or not these other sections, either by the Commission or

by the railroad, have any preference over our community as to car fare rates or as to whether there is any disadvantage suffered by our location? A. There is no question of the fact that when a car line goes out somewhere for one car fare and you can just follow this Map C at any one of these lines where they have one car fare, and you see the tremendous growth of the sections. Now this Dundalk section has grown three or four hundred per cent., or more than that, almost a thousand per cent. of cottages, of people. Some of them work in Sparrows Point and some work in Baltimore, but the fact is they move down in that section because one car fare takes them in Sparrows Point and one gets them to Baltimore and they are the same distance at either end.

Now the railroad also goes out to Dundalk Junction, and it goes out to Halethorpe at the same station, and the base rates are approximately the same on the railroad, and yet the trolley car fare is twice as much to Halethorpe than the other sections farther out.

Now up at Lorraine Cemetery, where our friend Mr. Clark is, that whole hill up there beyond Kernan's Hospital is spotted with houses that before that was taken over there weren't any houses to speak of in that neighborhood. And the Gwynn Oak section, all along passing Gwynn Oak Park and back in those developments there were no houses to speak of. There were houses out to Wayne Avenue where the fare terminated and very scattered beyond that and out.

Q. And there have been several developments at Overlea that have entirely started since they got the one fare? A. Yes, sir. And out Hamilton Avenue beyond Taylor Avenue it's like a new city out that way. During traffic at night going out there you can hardly get along the roads, they are so crowded, and people built back and back and back three or four blocks houses that we would hestitate to build for fear we couldn't sell them, and yet they are selling them out there. They look like they are turned out of a mill, all the same, and we have to compete with that. And those people get as much for their houses as we get for a house that's individually designed and well built.

Q. Designed by a competent architect and built of the best material? A. Yes, sir.

Q. When you speak of Woodlawn you are speaking of outside the city boundary, the development that's occurred since the extension of the car fare? A. Oh yes, that's beyond the city. The original one fare was very close to the present city line, so that all of that development of something over a mile outside of the city is all in the county now and the great majority of the Dundalk Junction is out in the county. The line from where it crosses the city line to Dundalk Junction is over a mile and a half.

(The Chairman) Do you know whether any particular development has taken place down there since the Shipping Board built all those houses down around Dundalk and Dundalk Junction?

(The Witness) Since the Shipping Board built those houses, and they have been absorbed by people living there, there has been built at Dundalk 120 some houses in Dundalk proper.

Q. Since what year? A. Since the one car fare was down there, and St. Helena has had 60 new houses, Graceland Park that is down in that section 60, Lorraine Park 40 and Milburn Heights has 15, and Hudson Heights has 20 and Colgate Park has 25, and before that time there were practically no houses there except the Shipping Board houses, and these people go back and forth both ways. If a man works at Sparrows Point it doesn't necessarily mean his whole family works there. The family can come to the city or the man himself for one fare a distance which is a little greater than the distance to Halethorpe, and also a distance out in the county which is as far as the Halethorpe distance out in the county.

Q. John, if you can point out on that map, point out about where the Union Stockyards are? A. The Union Stockyards are right along in here (indicating), where the old city line ran along this river (indicating) and this is Carroll Park, where the golf course is now close to Gwynn's Falls.

Q. Now point out where Oaklee Station is? A. Right here (indicating).

(The Chairman) Right on the line?

(The Witness) No, it's about 300 feet out in the county.

Q. Now at Oaklee, aren't there quite a number of butchers and who live right at that location? A. There is quite a settlement there of butchers. The Kaufman's, who have a meat market, have quite a little section there and there is a tremendous growth at that one fare.

(Commissioner Harper) Is that at Leeds Avenue?

(The Witness) Yes sir, between Leeds and Wilkins Avenue, called Ridgwood, and they are developing up to Kensington now which brings them about in the one fare, and then it is sparse until you get to Arbutus and Halethorpe.

Q. Now point out where Maidens Choice Lane is on the Benson Link, Leeds property? A. Right here (indicating).

Q. How far is that from Oaklee Station? A. About half a mile. I think it's four-tenths of a mile by the speedometer from Oaklee Station.

Q. Now we have how many people that we have sold there? A. We have people living in ten houses.

Q. Now those people walk, don't they, to Oaklee Station? Most of them? A. Most of them walk and people walk from further than that. People that walk completely by our place from Arbutus up, and they walk around from that direction and over to Morrell Park, this section here (indicating), they walk across there so that it wouldn't be any increase to the United to get those people, to extend, because they wouldn't lose anything, because the people get on there any way and that has all grown since the one fare.

Q. When did that development at Oaklee Station, not the Kaufman's own property, but the other development start? That was since the one fare started? A. Yes sir.

Q. What is the name of that? A. Ridgwood.

Q. And that started since the one car fare went into effect? A. Yes sir.

Q. Now, John, can you give any idea, I don't suppose you kept a record of it, but can you give any idea of the number of people who liked your houses and liked the location, but would not buy because of the two car fares? A. It would be pretty hard to say because we didn't keep an absolute record of it, but going to see people, people that have seen the houses and people that haven't seen the houses, more than half of them object to Halethorpe before I would say two words. They would say Halethorpe; they would live anywhere on earth than Halethorpe. Why? Because it's so far. Why it isn't so far. Well you can't tell me because I know it's two fares, and the sum and substance of it is that this little distance out here (indicating), and it would be an advantage to the United to let these people ride, because if it were one fare out there it's less than the average of all of the rest of these (indicating). It wouldn't set any criterion or any principle whereby they would have to extend anybody else out, and we would serve a big manufacturing section down here (indicating), and we also have a potential manufacturing section which will grow up on the B. & O. grounds which the B. & O. is planning to operate and have sold some but they haven't turned it all loose because they haven't got their plans perfected, but when they put the Iron Horse out there they put water in and they didn't put temporary water in, they put 6 inch main in, and they put T's at places where they figured on putting streets, and they have told us that that is going to be a purely commercial factory development, and they have sold part of it already, but they are not ready to testify to that and they are not ready to say because they don't know exactly what they are going to do with it.

Now we would be in a situation just like the people at Dundalk where the car would feed in both directions. One fare to Halethorpe from these factories out here, Halethorpe people going to town on the inbound trip and factory people going out on the same car, giving

them two directions, whereas practically none of these north or northeastern or northwestern sections carry but in one direction, and if we don't get this thing this time goodness knows we will never get it, and we have got to do our best to show the United that they haven't anything to lose. The United has a whole lot to win by developing this section. As you can see in the 1816 boundary (indicating), the eastern part didn't want to come in, because it was commercial, and neither did the southern part, this one continuous block of ground and one continuous section (indicating). The railroads all came in and went through this part (indicating). The little Northern Central is not a commercial road except for coal and there is practically no manufacturing up there except a cotton duck along the valley, and it's a discrimination that we are not entitled to. It isn't like we were way, way out somewhere that it cost more to operate. It certainly costs so much a car mile to run a car mile, and here we are in the same district with those other terminuses, and we have to pay twice as much, four others further out than we have to pay, we have to pay twice as much as they do, and one fellow still further out, we still have to pay twice as much as he does, and he has twice as much ride as we have.

EXAMINATION SUSPENDED.

(Mr. Tingley) If the Commission please, before closing our case, I would like to ask that all protests be made a part of this case.

NOTE: At 4.30 o'clock, P. M., the Commission then adjourned until Wednesday, November 23rd, 1927, at 10.00 o'clock, A. M.

THIRTEENTH DAY.

Thereupon—

JOHN O. BENSON,

a witness of lawful age, produced on behalf of the Patrons of the No. 3 Car line, having heretofore been duly sworn, according to law, and whose examination was suspended for the purpose of adjournment, resumed the stand, was examined and testified as follows:

DIRECT EXAMINATION (Continued).

By Mr. Carville D. Benson:

Q. John, how did you come to adopt the air-line measurement from the center of the City to Halethorpe as a basis of the exhibits you filed here? A. In the preliminary case we filed two exhibits, A and B, that related to the actual route mileage of these actual lines, and since then, in studying up on these back cases, this 1924 case, we find that the Commission has taken the center of the city as the measure of the distance.

Now the only way you can take the center of the city and measure to the other places is airline, because the lines don't go to the center of the city, therefore we took the center of the city and developed these exhibits on that and of course there was an exhibit filed by the Sparrows Point people, I think Mr. Pettit, exhibit No. 1 that gave an airline proposition on mileage and we just simply followed that out to all the facts that we have got now.

Q. Would you read into the record what the Commission said with reference to the Middle River lines and and the Dundalk lines and the city extensions? A. On page 9 of the Public Service Commission opinion, case No. 1682, it says:

EXTENSION OF ZONES

"Applications have been for the extension of zones on all the lines operating in the city to the new city limits." These applications include:

"River View lines to be extended from 15th Street and Eastern Avenue to Dundalk Junction."

Which incidentally is out into the county.

Q. How far? A. About half a mile.

Q. Dundalk Junction is over half a mile? A. From River View.

Q. Oh, yes. A. (Reading) "This would include the Canton Section and the River View, St. Helena and Dundalk section in the city zone."

That is, these places that are in the county would be thrown into the city zone.

"The Sparrows Point and Bay Shore line patrons request that the City zone be extended from 15th St. and Eastern Avenue to Dundalk Junction, the same point where it is desired to extend the River View Line."

Which, of course, takes in all those places which are out in the county, and that distance beyond the City line is one mile and six-tenths, 1.59 is the figure, we have from the United.

"The Back River and Middle River line patrons request that this line be extended from Fifteenth Street and Eastern Avenue to the City limits. It has further been requested that the second zone be extended to Mace Avenue, so as to take in the community of Essex, and also to wipe out the third zone entirely.

"It has been requested that the one-fare zone on the Harford Avenue line be extended from Hamilton to the City Line."

And further on page 12 it speaks of these extensions and it says:

"That this is and has been considered by the Commission a desirable thing to do."

That is, to extend these lines equally and it says:

"It has been the policy of the Commission to extend the zones as rapidly as possible in order to wipe out inequality in the length of the ride."

And it doesn't necessarily say cross the city line, or from the city, because in the case of the Sparrows Point they go some considerable distance out.

It says: "The grossest inequality which exists, however, is in connecton with the three car lines going to River View, Sparrows Point, and Back and Middle Rivers. The length of the ride from the center of the City to the end of the first zone on these three lines is three miles."

And from or maps we figure that's airline measurement.

"The length of the ride on the Belair Road, Harford Road, York Road, Roland Park, Mt. Washington, Pikesville, Gwynn Oak, Hillsdale, Edmondson Avenue and the Frederick Road or Catonsville Line, is in each case over five miles from the center of the City."

And they have mentioned all of the lines that we have used in our exhibit except our own.

And then it speaks of the Curtis Bay transfer, if that's eliminated, that brings up to the five-mile limit, so that taking from the center of the City and assuming that about five miles is about air line, the Commission recommends the extension to Dundalk Junction of a distance, I presume, into the County, a distance of 1.59 miles on the Sparrows Point and over half a mile on the River View line. It said:

"This situation is brought about by the fact that at the time of the annexation of 1888, the Highlandtown and Canton district refused to come into the City. When the fare limits were extended to the old City limits by the annexation act, this district got no fare zone extension benefits. For six years now this eastern section has been within the City limits.... * * *"

Well, they also take in the Sparrows Point and Dundalk which is without the city limits.

* * *"and in the Canton district there are tracts of land available for industries with excellent railroad connections and water facilities."

And we tell the Commission the same thing, that we have land with railroad connections. We don't happen to have the water facilities, but we have the two railroads that go right thru that property that the B. & O. is planning to develop:

"It has been stated to the Commission that industries hesitate and in some instances refer to settle in this district, because the employees of the plans would be compelled to pay two carfares to get to and from their work, altho the ride would not exceed two miles from those living in the neighborhood of Patterson Park."

Which we tried to show by our exhibits as to the number of factories, etc., that if there were one fare these folks would live in our district and wouldn't be discriminated against to the extent of living way over on the other side of town somewhere and taking a very much longer rider to get to their work.

Q. John, incidentally all that northwest section from McCulloh Street to Mount has been taken over by the colored people, hasn't it? A. Practically, yes. Everything in the western section we consider as going in that colored trend, practically from Baltimore Street to North Ave. We figure it will probably stop at the Pennsylvania R. R. It will be sometime before it jumps. We don't think Fulton Avenue is going to stop it, altho some people on Fulton Avenue do.

Q. And quite a number of those people who have been driven out of the communities have come to our section already. What did you find out in your investigation and solicitation of those people that had to move? A. Whenever we find a district changing or a street changing, and we keep pretty close track on them, so that we get that almost as soon as our friends the colored folks do, we solicit every house to get a verdict from the people and we sell some of them, but the majority of them, even tho they have been living in the Western Section of the city from choice won't go out into our section for two fares, but will go east and in other directions out on the one fare line.

Q What effect if any has the large cars had on the

development of our section, and direct routing down town? A. The large cars were put into effect in December of last year, and taking the figures running month by month, up to December they run 2500, 2300, 2500, 2500, 2700, 2400, 2400, 2500, 2500, which is November and December which is the first month of the big cars it becomes 3400, and then following down 1927, it's 3300, 2945, that's a little low, 3300, 3300, 3300, 3400, 3200.

(Mr. Howard) Those are the figures at Halethorpe of what?

(The Witness) That's just the second fare, Halethorpe collection, gross. Now for September and October, I have larger figures on account of the Fair of the Iron Horse. That becomes 4300 and 5000.

(The Chairman) You mean these are the figures of the amounts paid by passengers on that road?

(The Witness) Yes, sir.

(Mr. Howard) Second fare zone?

(The Witness) Second fare zone.

Q. Where did you get those figures, John? A. We got those figures from the United. The United has been very courteous and kind and given us all the information in any direction, and I just got these figures this morning from them. We wanted to check up the total gross for the year, but in doing that we got this other word too, and taking the Iron Horse is a little above the average and estimating for the last two months, 3400 and 3500 which is in form with what goes on as Mr. Samuel Emmons said that December would probably be a little heavier on account of Christmas.

Now it gives a total for 1926 with one month of big fares as 3100 and it gives a total for 1927 of 43,700. If we take off 2500 for the Iron Horse, it's 40,000 and take now a thousand in December, 1926. It's practically a 33 and a third increase over 1926, when all of the other lines of the city were going back.

Now in one month, it wouldn't be possible to build or get enough people out there to increase the riding by

$900 in a month, there wouldn't be that many new people. It just goes to show that the people are willing to ride. The people are there. They didn't put up with the one-man car because in some cases that car actually made some people sick. The one-man trolley was bumpy and everything and then the transfer too. You see this gives us a straight down town without a transfer which, of course, is quite an inducement, so you see that a 33% increase against the city's decrease and the city's decrease has this increase to help pull it up in the other direction, and figuring the total, the loss to the United at say $40,000 a year, if we count this, showing how quickly we have built up with a little encouragement in the way of getting away with a transfer and good cars we have built up 33 1-3% immediately that we will build up enough to repay back this loss of $40,000.

Now this loss of $40,000, it's a whole lot out of any one man's pocket, but to figure how that checks up with the United. In 1924 the United's actual figures of loss due to the extension on all of their lines, including the Sparrows Point line, was $585,000. Figuring at the rate the United does of one cent increase in fare means an increase in gross revenue of about $4,000,000. That is one-eighth of one cent increase.

(The Chairman) That figure is wrong, isn't it, Mr. Benson?

(The Witness) Which one is that?

(The Chairman) One cent increase in fare means something like $2,000,000.

(The Witness) Then I will have to divide by two as I go along. Then that would become one-fourth of a cent, so that the United got at that time one-half cent increase, of which one-quarter was turned back, they realized in this one-quarter cent increase in 1924.

Now the Sparrows Point line was 289 and some 600 dollars of which that would be one-seventh of one cent and Halethorpe taking the 40,000 as we subtract the Iron Horse from it, as we won't expect that to figure in, comes to one-fiftieth of one cent and that is spread over the city as it should be, and in equity that's against us, a discrim-

ination against us. The people of the whole city shouldn't benefit at our expense on this small $40,000. Now, one-fiftieth of one cent is two trading stamps, one-fifth of a mill, that's how much it amounts to by the United say that any increase or even if the United doesn't get an increase, that isn't any great amount compared with the Sparrows Point line of practically $290,000.

Now Mr. Markell said that while that was all right about the Sparrows Point line because that was a paying line, and I have been thinking about that ever since, what Mr. Markell meant by that. Why if something is making money and making $290,000 a year, why it doesn't make any difference to cut that $290,000 of and the poor little people out our way are only making the Company $40,000.

Q. Gross? A. Gross and they say it isn't a paying line. We will tack it on to them. Now how they can give us $290,000 and gag at giving up $40,000.

Q. Gross. A. Gross, yes. Both of them are gross. I just can't figure Mr. Markell's figuring that way. Probably Mr. Markell has it figured out all right.

(Mr. Markell) Mr. Howard says the misunderstanding is mutual.

(The Witness) Don't you agree with me, Mr. Howard?

(Mr. Howard) No, I don't.

(Mr. Benson) I would like to offer this exhibit to be marked Exhibit I.

NOTE: Statement above referred to is here filed in evidence and marked Halethorpe Exhibit I.

(The Witness) This is to show the 7½c rate on all 12 city car lines as against the 15c rate on the Halethorpe line. The 7½c for one person makes a difference of $45.00 a year, which would make a difference of $60.00 a year at the ten cent rate and if two people in the family rode at even the 7½c rate that makes $90.00 a year, or a difference equal to capital investment of $1500.00, or a normal ground rent. I said that yesterday, but I merely put it in this form.

Q. John, Mr. Emmons and the Commission themselves have several times referred to the City boundary. I want to ask you whether when they were extending the Harford Road line, even tho there is one fare left beyond, whether they didn't extend that half mile beyond the city boundary to take care of the Taylor Avenue section? A. Yes, that's so, they go out to Taylor Avenue, which is some little distance beyond the actual city lines at that point. That is Taylor Avenue is the center of what was a little section out there before and they went out there to take up that section, the same as going to Dundalk, they go beyond the city line to take up the section of Dundalk, and St. Helena, regardless of whether it's in or out of the county.

Q. How far did the extension on the Halethorpe line extend beyond the City line? A.This last extension?

Q. Yes. A. In 1922 or '24 when that was extended they go 300 feet out, and the only reason they went 300 feet out was because that was the distance from the nearest road.

Now a good many other extensions that don't amount to half a mile the City mile, might be just one block, a perfectly legitimate place to stop, but if you are going to say the City line is the absolute limit and they have gone one, two, three or four blocks beyond that for reasons best known to themselves, and in some cases a mile and in the Sparrows Point case a mile and six-tenths—

(The Chairman) Beyond the City limits?

(The Witness) Beyond the City limits.

Q. How about Woodlawn? A. Woodlawn is a mile beyond the City limits. The Sparrows Point distance, the total distance to Dundalk junction is less than to Halethorpe and the Sparrows Point mile in the city is half a mile more than the Halethorpe ride to the one fare, and then on top of that they get an extension into the county, which is almost as long as the Halethorpe extension.

Q. What difference is there, there? A. The difference is about a quarter of a mile between the two. The two cases are so near alike, and every thing that refers to one refers to the other case. The City extension refers to the

southwest. In this discrimination, the Commission says that the Southeastern section is discriminated against, and also gave the car lines, but it says against the northeastern, the northern, the northwestern and western, all of those discriminated against, but it don't say anything about the southwestern. We are the southwestern. The two cases are alike and we say that we should be placed in the same boat as the people at Dundalk Junction, a quarter of mile less total haul, half a mile less haul in the city and only a quarter of a mile more in the county.

Q. Now you say Halethorpe? A. I mean the two-fare distance to Halethorpe as compared with the present one-fare distance to Dundalk Junction.

Q. Is more or less? A. Halethorpe is one-quarter of a mile less than the distance to Dundalk Junction.

(The Chairman) How far further into the county?

(The Witness) About a quarter of a mile, not over a quarter of a mile, and the same industrial conditions hold. We have a big potential growth out there, in a thousand scores that's being held for industrial purposes only. A. Are there any other lines that extend out into the county? A. This red line (indicating on map on wall) is the present county line and these big dots are the one fare terminuses, which the exception of this one, which is the Halethorpe two fare. Now this Frederick Road line is Nunnery Lane. Now Nunnery Lane has some three or four blocks beyond. It's quite a discrimination to even go one or two blocks when it goes to back up a section which is competing against another section that doesn't have it. And Lorraine Cemetery, practically all the growth out in the Lorraine Cemetery Section since this fare has been out in the county, the Kernan Home for Children practically takes up all of the north side of the trolley car tracks as you come out and on the south side of the avenue, before you hit the county, there are a bunch of old houses along that line that take up practically the whole road with no room in there for avenues. There is land back of it to develop which you would have to go thru to get some of those.

Now Woodlawn is a mile out. Lakeside is out. Har-

ford Road is out to the center of population there, Taylor Avenue. Overlea has been there, of course, for some time and this one goes out and takes up St. Helena and Dundalk and goes within a quarter of mile as far out as we are from the city line, and as far as that was concerned, if that quarter of a mile would gag the Company we would be willing to have them stop a quarter of mile short if that's the limit. But, of course, that wouldn't make much difference one way or another. We say why should we pay two fares when all of these fellows that we are competing with, and its strong competition, we have to buck them all the time with one fare and as I showed in the exhibit about the big cars, when we get a little chance to come back, we show a very decided improvement. I don't imagine the United expected that 33% increase of growth when they put on the big cars. Did you, Mr. Emmons?

(Mr. Emmons) We had a double expense pretty near putting on the big cars. I don't think the growth helped us any.

Q. How about the development of Woodlawn, since the extension of that line? A. All of these sections, whether it's Woodlawn, Lorraine or out here on the one fare, Hamilton Avenue, they have all grown tremendously since, and out in our section around the end of the present one fare it's practically built solid, along a radius of half a mile. Kensington over on the other side of Wilkens Avenue, the nearest point, is half a mile from the present car stop. They are building back still a further half mile in two directions, so the people want to live in this section, but they can't afford to pay the two fares, and it's a short haul. It's much shorter than any of these others, and this industrial section will get fed from this side.

Q. Now John, the only difference between the situation at Dundalk and Halethorpe is that Halethorpe has a quarter of mile more in the county than Dundalk has? A. Yes, sir.

Q. And it has a half mile less in the City? A. That's right. The end is a quarter of mile less total.

Q. Yes, a quarter of mile less total to Halethorpe? A. Yes, sir.

(Mr. Benson) If the Commission please, I would like to offer this as Exhibit J. It's a map that I got from the Chamber of Commerce of Portland, Oregon. The purpose of introducing it is to show that in a very important case that went to the United States Supreme Court that all of the measurements were taken from airline from a junction that is within one-third of a mile from the center of the city as shown by this map. We have traced on the map in heavy blue pencil the various routes that are mentioned in that decision which will be used hereafter.

NOTE: Map above referred to is here filed in evidence and marked Halethorpe, Exhibit J.

Q. John, what class of citizens are living at Halethorpe? Are they rich people or people of moderate means? A. The people that live out at Halethorpe are working people that have to work for their living.

They are of moderate means, they are not the poorest people in the world, and they get along as well as most people get along in their circumstances, and the thing that we run into of people that would like to come in that direction is the two carfares. They like Halethorpe and like the houses that we build, I am a salesman again, Mr. Commissioner, but they can't see the two carfares. They say there are four people in the family that work and even tho some of them work in the immediate neighborhood we have people that work at Miller Safe or at the Stock Yards that refuse to come out our way, even tho they like the houses and like the neighborhood, and I like all the facilities that we have out there, but they can't see the extra fare. As I say if there are two people in family that work, that means practically their ground rent a year.

Q. $90.00 a year excess? A. $90.00 a year excess at the present 7½c, which would be $120.00 at the increase.

(Mr. Toole) And if there were four they would pay twice as much?

(The Witness) Four people pay twice as much.

(Mr. Toole) And weren't there some houses that have four in the family that work?

(The Witness) Two is nominal.

(Mr. Toole) Would it be a stretch of imagination to make it three?

(The Witness) I will agree with you, Mr. Toole, in anything you say.

(Mr. Toole) I want to know. About how many people work, if you know, in a house in your neighborhood?

(The Witness) We have sold quite a few houses to people in which the husband and wife both work. Now that's two. In that case they usually don't have more than two, because they don't have any family that is growing. Those are young people that are starting out. We have other families, big families in which several boys work and the father works.

(Mr. Toole) You have some girls work too, don't you?

(The Witness) And there are some families that have four.

(Mr. Benson) That's all unless you have something else.

(The Witness) No, only I want to thank the United for being so courteous. But they are getting ready to jump me now, but it will be all right.

(Mr. Howard) We will go one step further and waive cross-examination.

(The Witness) Thank you, again, gentlemen.

NOTE: No cross-examination.

(Examination concluded.)

(Mr. Sobeloff) If I may at this time I would like to offer in evidence the protests of about 5000 individuals and civic bodies addressed to Mayor William F. Broening, protesting against any increase in fare.

While I realize, of course, that the question of the fare cannot be predicated altogether on public opinion, as re-

flected in these protests, I do think that is a legitimate factor to be considered by the Public Service Commission, because while this Commission can regulate the fare paid by each rider, it can't order people to ride, who consider the fare excessive.

(Mr. Markell) You mean their willingness to pay.

(Mr. Sobeloff) Their willingness to pay will have some bearing on the number of riders.

Thereupon—

HOWARD J. GEYER,

a witness of lawful age, produced on behalf of the patrons of the No. 3 carline, having first been duly sworn according to law, was examined and testified as follows:

DIRECT EXAMINATION.

By Mr. Benson:

Q. Mr. Geyer, what is your name? A. Howard J. Geyer.

Q. What is your business? A. Contractor. Superintendent of Minter Homes Corporation.

Q. Where do you reside? A. I live in Ridgwood, that's just the other side of Violetville.

Q. Near the end of the first carfare on the Halethorpe line? A. Yes, sir.

Q. Where did you previously live? A. Halethorpe.

Q. You used to build some at Halethorpe, didn't you? A. Yes, sir.

Q. How many years ago was that? A. That's been about five years.

Q. When you were building at Halethorpe, did you have charge of the building and selling both? A. Yes, sir.

Q. Who were you building for at that time? A. Mr. Oregon Benson, sir.

Q. My father? A. Yes, sir.

Q. When you went there five years ago, where did you go with your principle operations? A. We started in Sparrows Point.

Q. Who were you building for down there? A. The Bethlehem Steel Corporation.

Q. Where did you build down there? A. We built the first year right in Sparrows Point.

Q. Yes. And where did you build the second year? A. Then we moved to Dundalk.

Q. Have you done much building down around Dundalk? A. Yes, sir. Quite a few houses been built in that section.

Q. Have you as Superintendent of this Company that you represented done much building? A. Yes, sir.

Q. Now will you tell me the condition with reference to building at Dundalk and between Dundalk and what was the end of the first carfare when you went down there? When you went down there the end of the first carfare was 15th Street, wasn't it? A. Yes, sir.

Q. Will you tell me the condition prior to that time and what has been the condition since that time? A. Prior to 1923 there was very little building from 15th Street to the Dundalk Junction. I would say there would be approximately 15 or 20 houses.

Q. A year? A. Between those two periods, 1922 and 1923. I wouldn't say positive about that, because they are kind of scattered all thru the territory, and it would be mighty hard to tell, but from 1924 to the present time, from the end of 15th street to Dundalk Junction, there are 580 some houses been built and several new developments opened up. I have a list of each one of those developments here.

Q. Does this chart represent that situation? A. Yes, sir.

(Mr. Benson) I would like to introduce this as Ex. K.

NOTE: Blue print chart above referred to here filed in evidence and marked Halethorpe Ex. K.

Q. How will you explain that? A. On 18th, 19th and 20th Streets, from 1924 to the present time, the Milburn Realty Company have built 75 homes.

Q. Is that the Company you represent? A. No, sir, that's another concern. On 25th, 26th and 27th Streets on Eastern Avenue the Frank Novak Company has built 150 homes.

On O'Donnell Street, Milburn Heights built 16 homes, that's an entirely new development just opened up within the last year and a half.

Norwood Park is a new development just been opened up in the last two years, they built 12 houses.

Lorraine Park, near the carline, they built 40 houses. Fairlawn at Camp Holibird built 27 houses. Graceland Park 60. Hudson Heights near the carline 80. Dundalk on the car line 116 houses. Colgate Park 25. St. Helena 60. That's about as near as I can get to it.

Q. Those were all built since the one carfare out there?

A. Yes, sir.

Q. How you had charge of the selling at Halethorpe. Tell me what the conditon of the selling was at Dundalk when you first went down there before the carfare was reduced as compared with Halethorpe? A. Of course, before the carfare was reduced in Dundalk it was practically even hard to talk about selling a house in that neighborhood.

Q. How did it compare with Halethorpe when they both had the same fare? A. About the same.

Q. How has it been since the one fare? A. It's been much easier to sell property on the one fare, because the people are moving out of the section where the foreigners live in the eastern section, and they are coming out in the suburbs, it makes it much easier.

(Mr. Benson) That's all, Mr. Geyer.

(Mr. Howard) No cross-examination.

NOTE: No cross-examination.

(Examination concluded.)

Thereupon—

CHRISTOPHER R. WATTENSCHEIDT,

a witness of lawful age, produced on behalf of the Patrons of the No. 3 car line, having been duly sworn, according to law, was examined and testified as follows:

DIRECT EXAMINATION.

By Mr. Benson:

Q. Mr. Wattenscheidt, you are a member of the Bar? A. I am, yes, sir.

Q. Also interested in real estate? A. I have several developments that I own in and around Baltimore, one at Arbutus of 34 acres that I have had for about 12 years.

Q. Have you some other developments? A. I have one at Joppa, one at Middle River, and one at Stoney Creek, Anne Arundel County.

Q. You also represent a number of building associations, don't you? A. Yes, I rather specialize in real estate finance.

Q. How far is the property that you own on the Halethorpe line from the center of the City? A. I think it's somewhat short of five miles, Senator. To be specific I am at the intersection of Sulphur Spring Road and the Pennsylvania R. R.

Q. You have heard the testimony of my son this morning? A. In part, yes, sir.

Q. You heard it this morning? A. I heard his testimony this morning.

Q. You have examined this map, the exhibit hanging on the wall in back of you? A. I saw one of the charts.

Q. Now what have you got to say with reference to

the effect of two car fares on a community like Halethorpe that's five and three-eighths miles from the center of the city as compared with other like communities lying all around the city, that are as far or further from the center of the city? What effect does that have on Halethorpe? A. It clearly discriminates against that section. There are other sections in various outlying portions of Baltimore City and in the annex and the county which give a very much longer trip for a single fare than happens to be the case with the Arbutus and Halethorpe lines.

Q. Longer in most cases than we get for two fares? A. Precisely.

(Mr. Benson) That's all.

(Mr. Howard) No cross-examination.

NOTE: No cross-examination.

(Examination concluded.)

Thereupon—

G. JUDD STEVENS,

a witness of lawful age, produced on behalf of the Patrons of the No. 3 car line, having first been duly sworn, according to law, was examined and testified as follows:

DIRECT EXAMINATION.

By Mr. Benson:

Q. Mr. Stevens, what is your business? A. Real estate broker.

Q. How long have you been a real estate broker? A. About 20 years.

Q. Do you sell houses in and around Baltimore? A. Yes, sir.

Q. Specialize in selling dwelling houses, don't you? A. Yes, sir.

Q. You have been selling for whom around Catonsville and other places? A. M. Filmore Corter.

Q. You have been selling also some for the Benson Link Company recently? A. Yes, sir.

Q. And you conduct a general brokerage business in addition? A. Yes, sir.

Q. Are you familiar with the neighborhood lying around Baltimore that have one carfare that lie out in the county? A. Yes, sir.

Q. Are you familiar with the property at Leeds and Halethorpe? A. Yes, sir.

Q. What effect, if any, has Halethorpe, having the two carfares as compared with these other sections upon the development and sale of property at Halethorpe? A. I have found out from selling the cottages at Leeds and Halethorpe in the last year or 18 months that I missed many a sale on account of the two car fares. In several instances there were more than one that had to go to work every day and they considered the two car fares was too heavy an item. We have a very fine house at Halethorpe and Leeds, and the people come there and they realize it, but when it comes to the two car fares, they say well I don't think we can buy here. It's been a handicap right straight thru in selling the property.

Q. You are not employed by the Benson Link Company? A. No, sir, only on a commission basis.

(Mr. Benson) That's all.

(No cross-examination.)

(Examination concluded.)

Thereupon—

EMORY A. KELBAUGH,

a witness of lawful age, produced on behalf of the Patrons of the No. 3 car line, having first been duly sworn, according to law, was examined and testified as follows:

DIRECT EXAMINATION.

By Mr. Benson:

Q. Mr. Kelbaugh, where do you reside? A. Harmon Station, Anne Arundel County.

Q. You are a contractor and builder? A. Yes, sir.

Q. Also been building some houses in conjunction with Mr. Rittenhouse for sale in the last several years? A. Yes, sir.

Q. Where have you been building those houses? A. North Halethorpe, running from Sulphur Springs south to the Benson Link property.

Q. Really you begin at Arbutus and run south to the dividing line between Arbutus and Halethorpe. A. Yes, sir.

Q. How many houses have you built there in the last three or four years? A. About 50.

Q. Have you had any vacant land offered you recently at Halethorpe? A. Yes, sir.

Q. Was the price too high? When was it offered to you? A. In the last six months. I wouldn't consider it too high ordinarily.

Q. What have you found the effect of two car fares to Halethorpe? A. Our building, we have had a strategic position, we have been immediately on the car line which helped some, I wouldn't buy any ground any distance from the car line, not on two fares, but some few people are being willing to pay for being close up, but I don't see any chance in developing half a mile from the car line as they do in the northern section on Bel Air and Harford Road. The people won't go to a little inconvenience and pay two car fares.

Q. What effect, if any, has been the agitation of two ten cent fares to Halethorpe? A. I can hardly answer that because I don't come in direct contact with the people. Mr. Rittenhouse does the selling.

Q. Have you done much selling since then? A. No, sir, one house.

Q. What are you doing in regard to building now? A. Very little.

Q. Well you are closing down, aren't you? A. Practically.

Q. Didn't you make some investigation as to commutation rates on the W. B. & A. with reference to a piece of property you were looking at down there? A. I did that. I got the fare to Ferndale, because I used to own Ferndale, one section of it and that's down in the county.

Q. Further out than Halethorpe? A. Oh yes, and I found you could buy a commutation for $5.70 for a month.

Q. That's all.

NOTE: No cross-examination.

(Examination concluded.)

Thereupon—

OREGON R. BENSON, JR.,

a witness of lawful age, produced on behalf of the Patrons of the No. 3 car line, having first been duly sworn, according to law, was examined and testified as follows:

DIRECT EXAMINATION.

By Mr. Benson:

Orry, what is your business? A. Real estate.

Q. You are a real estate broker, too, aren't you? A. Yes, sir.

Q. How long have you been in the real estate business? A. About 12 or 13 years.

Q. Where do you live now? A. Sudbrook Park.

Q. You used to live at Halethorpe? A. Yes, sir.

Q. Have you any property around Halethorpe? A. Yes, sir.

Q. Quite considerable, haven't you? A. Yes, sir.

Q. Do you know the outlying sections of that part of Baltimore where they have one car fare out in the county? A. Fairly well.

Q. Tell me what you know? A. I know the conditions of the car line.

Q. What's the condition out at Overlea? A. They have a one fare out there to Overlea and Hamilton, and they have a one fare out to Slade Avenue on the Pikesville line.

Q. Now what is the condition of the development, as a result of one fare, if you know it on any of those lines? A. The condition of the development on the one fare is wonderful compared with the two fares. The houses are built in rows, they may be separated in a suburban development, but there are many built in rows, and it is practically a solid development and they are actively engaged in construction work, and where the two fare lines are it's a scattered development.

Q. What have you got to say as to the effect on real estate values by giving to one community the same or less distance from the center of the city, two fares and giving to the other communities one fare? A. Well, where they have the one fare, they not only are able to get a better price, but there is a better demand for the property, and it can be sold, where many times on the two fare line they would have to sell it at a sacrifice.

(Mr. Benson) That's all.

(No cross-examination.)

(Examination concluded.)

Thereupon—

ROBERT THOMAS ALINSON,

a witness of lawful age, produced on behalf of the Patrons of the No. 3 car line, having first been duly sworn, according to law, was examined and testified as follows:

DIRECT EXAMINATION.

By Mr. Benson:

Q. Mr. Alinson, what is your business? A. The manufacture of concrete units and the distribution of building material to dealers.

Q. With what firm or corporation, are you associated with? A. Maryland Concrete Asso. at Halethorpe. At Halethorpe one plant.

Q. Where is your other plant? A. H and O'Donnell Street, ten.

Q. Mr. Alinson, what have you got to say as to the effect of two car fares upon Halethorpe, and also as to the effect of the threat of two ten cent fares to Halethorpe? A. There have ever been any question, so far as our book accounts show that since the agitation for two fares on the part of the United Railways, building has materially lessened, to such an extent that we find our investment way in excess of what it should be for the amount of business we are doing.

(Mr. Howard) You mean agitation for two fares, don't you?

(The Witness) Yes, two ten cent fares. We are certainly in a position to know because we are doing business with practically every man that took this stand to testify. We sell them their material and they are out to sell their houses, and we are well in position to know that since this agitation started for two fares that business is almost at a standstill; that these gentlemen are not doing anything. They have all sorts of property out there, and we are practically idle. People want to come out there but they are reluctant, because they don't know what this decision is going to be.

Q. Now prior to the agitation there was a pretty steady development, was there not? A. It was fair enough, Senator, but I don't think anywhere near what it would be if there was one fare, but it was fairly gradual considering the two fares, prior to this agitation for an increased 10 cent fare.

(Mr. Benson) That's all.

(No cross-examination.)

(Examination concluded.)

Thereupon—

JOSHUA S. HULL,

a witness of lawful age, produced on behalf of the Patrons of the No. 3 car line, having first been duly sworn, according to law, was examined and testified as follows:

DIRECT EXAMINATION.

By Mr. Benson:

Q. Mr. Hull, you are a member of the bar? A. Yes, sir.

Q. Also in the real estate business, aren't you? A. Yes, sir.

Q. Your father was in the real estate business before you, wasn't he? A. Yes, sir.

Q. You have been doing business not only at Halethorpe, but in other sections, haven't you? A. Yes, sir, been developing at Halethorpe and round Roland Park.

Q. You have a development just east of Halethorpe, just now? A. I have about 160 acres there running from Washington Boulevard to the B. & O. R. R.

Q. Down where the Iron Horse was held? A. Near where the exhibition was.

Q. What effect has two car fares on this community out there? A. The two car fares have been a great drawback to the development of Halethorpe. I have handled, not only my own, but have endeavored to sell for a number of clients various pieces of property, and the great question that comes up first has been the double car fare.

Q. When you say for your clients you mean people who have had houses and because of death or for some other reason have had to sell them? A. Yes, sir.

Q. Not dealers? A. Not dealers, estates and things you get into as an attorney. Since this threat of a ten cent car fare, I have not sold one piece of property in my sub-division. I am handling a class of people that make their living by the sweat of their brow. They are not the white collar employee and they have large families and when this class of people are compelled to send a number of their family into the city, it makes a great difference in the living of that family. They are the first to be effected by the present hard times, because they are laid off, a number of them are employees in various corporations that lay them off, so they lose their time and some of them I have known them to walk to the city, because they couldn't pay the two car fares.

The other part of Halethorpe is developed by a better class of people, a more progressive, I would say, or more educated class and I live right in there, Senator Benson, lives in the same community and you can feel when you are taking people out to these sub-divisions to make a sale, you feel right away as soon as you start to talk car fare the thought that you have.

Since the first of January, well, I won't say that far, within the last six months, I have had three or four pieces of property that have come in my hands in Halethorpe, and I have only been able to dispose of two of them, and the first thing was two car fares, we are not going there.

At Ridgewood I had a piece of property there and I sold it in no time. Right at the terminus of the one car fare.

CROSS-EXAMINATION.

By Mr. Toole:

Q. About how many people in that neighborhood do you think work to a family? A. I would say in my sub-division alone I would say there are probably 300.

Q. I mean to a family. A. I would say on an average of three.

Q. At least three? A. At least three if not more.

Q. Now wouldn't that average hold over the city? A. Absolutely that would hold good over the city.

Q. Now what would you say, Mr. Hull, about the effect on the facility of people to meet their obligations in the event of this increased fare? A. Well, I know they won't be able to meet them as well as they did before, because it's quite an item if you have a week's pay and figure out three or four or five in the family going to the city and paying 40c a round trip, that's a lot of money coming out of a working man's wage. That ride to Halethorpe of less than two miles, it would be equal to the amount charged on one of these scenic railways in a pleasure park, absolutely.

(Examination concluded.)

Thereupon—

MRS. J. W. WILSON,

a witness of lawful age, produced on behalf of the Patrons of the No. 3 car line, having first been duly sworn, according to law, was examined and testified as follows:

DIRECT EXAMINATION.

By Mr. Benson:

Q. Mrs. Wilson, where do you reside? A. North Halethorpe.

Q. How many members of your family use the electric cars to go to work? A. At present we have two. My husband and one son. We have had three. My oldest son was married during the late summer and his wife and he are both employed in the city and just recently they moved to Ridgewood because of the two car fares. They felt that while they were even using the commutation books, which was $2.70 a book, they felt that in the course of a two or three years or a little longer that they would be saving sufficient to pay down on a home, and consequently they are both young and they are eager to start that account, while both families, his family and her family are both in Halethorpe and Arbutus.

CROSS-EXAMINATION.

By Mr. Toole:

Q. If you know out in that neighborhood how many people work to a house? How many people use the car lines coming into Baltimore, as a rule to work? A. That would be right hard to say. Some families have two, and three, some only one.

Q. As many as four in some? A. I really am not acquainted with any right now that have four, but there may be. I am not very well acquainted there, because I have only been there three years myself and we have found it right difficult to meet the conditions and there are quite a few people along in my row who have put up their houses for sale, for they cannot keep up expenses. It's too far, they are moving in.

(Mr. Benson) The only element of expense greater at Halethorpe than anywhere else is the car fare?

(The Witness) The car fare seems to be the buggy-boo as the saying goes but when we bought we were told they expected that within the course of a little while that the car fare would be one fare, and that was an inducement to us to buy.

(Mr. Benson) They never expected it to be increased, did they?

(The Witness) No, not at all.

(The Chairman) Who told you there would be one car fare?

(The Witness) The salesmen, that they thought perhaps in the course of time, that the car fare would be reduced to one fare which is the supposition of most people who live out there. We realize that it only takes 30 or 35 minutes to come from Halethorpe to the shopping district and I really think that two car fares is absurd for such a little ride.

(Cross-Examination Continued.)

By Mr. Howard:

Q. Who did you buy from, Mr. Wilson? A. We live on Selma Avenue.

Q. The salesman who told you that was an employee of whom? A. I don't know whether he was the employee of anyone; he was selling property of his own, I think.

Q. Who did you buy your property from? A. Mr. Rittenhouse, who was in business with someone else.

Q. Was Mr. Rittenhouse the salesman you mean? A. I think he had an interest.

(Mr. Benson) Mr. Rittenhouse is here and we will put him on.

(Examination concluded.)

Thereupon—

HOWARD T. DYOTT,

a witness of lawful age, produced on behalf of the Patrons of the No. 3 car line, having first been duly sworn, according to law, was examined and testified as follows:

DIRECT EXAMINATION.

By Mr. Benson:

Q. Mr. Dyott, you live at Halethorpe? A. Yes, sir, Mr. Benson.

Q. How long have you been living there? A. About two years.

Q. Where did you live before you moved to Halethorpe? A. Wilkens Avenue and Brunswick Street.

Q. Then did you move to Leeds and Wilkins Avenue? A. No, I moved from Leeds and Wilkens into Wilkens and Brunswick and then Wilkens and Brunswick out to Halethorpe.

Q. Do you know the people around the community, Mr. Dyott? A. Know them very well, sir.

Q. Will you explain as well as you can what effect the

two car fares has had upon that community, and what effect the threat of two ten cent fares has had upon that community? A. Well, simply the way that I see it has been the fact that in my roaming around town have frequently spoken to people in regards to moving out there, some of my friends talking about buying property and naturally I believe in boosting my own territory and the first thing they say is two car fares, and I try to argue that down, but that don't seem to get very far, and then they say it takes too long to wait for a car—there being a 20 minute service there during the day time, and that turns them against Halethorpe. On the other hand, if they had the one car fare, I believe it would have a tendency to increase of that territory rather than decrease it.

Q. What effect would two ten cent fares have upon Halethorpe? A. I don't want to think just what effect it would have. I think it would simply kill Halethorpe entirely.

Q. What effect would any further increase or retaining two fares on Halethorpe have upon it? A. It would have virtually the same effect in my opinion. I think it would throw Halethorpe back for many years to come because the fact that two car fares seems to be the bugga-boo to any one buying real estate.

Q. And not only Benson and Link, but practically all of the other builders have practically stopped building, haven't they? A. Have stopped building, because I am in position to know, that they have stopped building because of my business connections out there.

(Mr. Benson) That's all.

NOTE: No cross-examination.

(Examination concluded.)

Thereupon—

CHARLES C. RITTENHOUSE,

a witness of lawful age, produced on behalf of the

patrons of the No. 3 car line, having first been duly sworn, according to law, was examined and testified as follows:

DIRECT EXAMINATION.

By Mr. Benson:

Q. Mr. Rittenhouse, you are in the real estate business now? A. Yes, sir.

Q. Interested in the Arbutus Land Company? A. Yes, sir.

Q. And also interested with Mr. Kelbaugh in his development there? A. Yes, sir.

Q. You do the selling, don't you? A. Yes, sir.

Q. What effect in your selling of houses have you found that the two car fares had upon this section? A. Well, you hear of a good prospect and you go to see them, and the first thing they find out where you are selling and you say Halethorpe, and the first thing they say that is a two car fare line. Well, yes, we always try to tell them, that it is only a matter of time, when we get more people there, we will get one car fare there, but it's pretty hard to even get them to look at a house. They won't even go out to look at the house when they find out it is two car fares.

Q. You have never made any promise or told anybody that there would be one fare at any time? A. No, sir.

Q. But you had every reason to believe if the car fares were extended to other locations at as far or further than Halethorpe, that they had a right to expect a single fare? A. That's right, yes, sir.

Q. What effect does it have on the value of property? Same class of house, same class of lot? A. Well, we are building a better class of house at Halethorpe than they are in other communities and we have to sell it for less money.

Q. Why is that, any reason besides the two car fares? A. No.

Q. We have good schools in that community? A. Yes, sir.

Q. Water and gas? A. Electric and good roads.

Q. Churches?

(Mr. Howard) Low taxes?

Q. You can't figure out tho, when we happen to have less taxes why the United should be permitted to collect the difference, do you? A. It don't look right.

NOTE: No cross-examination.

(Examination concluded.)

Thereupon—

J. HENRY STROHMEYER,

a witness of lawful age, produced on behalf of the Patrons of the No. 3 car line, having first been duly sworn, according to law, was examined and testified as follows:

DIRECT EXAMINATION.

By Mr. Benson:

Q. Mr. Strohmeyer, what is your business? A. Real estate broker and developer and builder.

Q. Mr. Strohmeyer, are you associated with anyone in this business or in business for yourself alone? Aren't you connected with certain corporations? A. Yes, sir.

Q. What connections have you, as officer or director of any corporations in the real estate business? A. I have connections with three companies that own real estate, one company owns real estate in Halethorpe, and in other parts of the city and I have connection with mortgage companies and trust companies, appraising property.

Q. What companies do you appraise property for? A. National Mortgage Company, Bonded Mortgage Company, First National Company, Arundel Mortgage Company, and some trust companies, Baltimore Trust Com-

pany, Central Trust Company, for the City of Baltimore and various other people.

Q. And some insurance companies? A. Insurance companies, yes, sir.

Q. Your business is largely appraising property? A. I have done a good deal of that.

Q. And you do that all over the city and in the suburbs? A. Yes, sir.

Q. Now you know this neighborhood out there at Halethorpe? A. Yes, sir.

Q. You know it as compared with all the outlying suburbs like Woodlawn, and Taylor Avenue, Harford Road and Dundalk? A. Yes, sir.

Q. Now can you give any reason why Halethorpe with five and three-eights miles from the center of the City, the closest to the center of the city of all the lines around except one, that's the Eastern Avenue and Middle River line, why it should have two fares and all the rest of them one? Can you think of any conceivable reason? A. The only reason I know is, as I understand the Railway Company, tried to make the city lines the terminus for the one fare.

Q. They don't do it tho. A. The terminus of that southwestern section comes off on an angle and makes Halethorpe so much closer to the center of the city than it otherwise would be if the line was kept on a direct line.

Q. If the line was kept on a direct line we would be in the city? A. Yes, sir.

Q. Does that make any difference to the United whether we are in or out of the City? A. I can't see the reason, because you can do long distances on other lines for one fare than you can go to Halethorpe. For example, you can go to my home on one fare.

Q. Where is that? A. Mt. Washington.

Q. You also can go out in the county? A. Woodlawn, yes, sir.

Q. Lorraine Cemetery? A. Yes, sir.

Q. And Taylor Avenue on the Harford Road? A. Yes, sir.

Q. Dundalk Junction is about a mile and six-tenths beyond the city limits and Halethorpe is about a one and eight-tenths? A. I don't know the distances, but I can readily see they are all a greater distance than Halethorpe.

Q. Now Dundalk Junction is about a quarter of a mile nearer to the City line than Halethorpe, but it's half a mile further from the center of the city than Halethorpe. Now can you see any justification for Dundalk, half a mile further from the center of the city, but only a quarter of a mile further from the city line having one car fare and Halethorpe having two? A. No, I cannot.

Q. Would you say Dundalk Junction had a preference over the locality at Halethorpe? A. You mean considering real estate values?

Q. You know what a preferential rate is, don't you? A. Yes, sir.

Q. You consider that Dundalk Junction, Woodlawn and these other outlying sections in the county have any preferential rate over Halethorpe? A. I should say they had.

Q. Do you think there is any discrimination over Halethorpe by having two fares? A. I should say so.

Q. What effect does the having of two fares to Halethorpe as compared with these other places have upon real estate values in that section? A. Well, the question of fares is also an element for quite an important factor in appraising property, and we take the increased fares and capitalize them, you would have to deduct that amount against the property in the county, and that would depreciate the value of the property in the county on the two fare zone.

Q. That is an assumption that you and other appraisers work on? A. Yes, sir.

Q. When you go out to appraise a house and lot and

ground and you find it's out here and you have got to pay two fares——

A. Yes, sir.

Q. How many people would you assume would grabble to get at that? A. Well that varies. We would say from 15 to 30 cents a day for example and take the low rate for example, figuring on 300 days is $45.00, capitalize that at 6% is $750.00

Q. That's just taking one passenger a day? A. Round trip, yes, sir.

Q. And that makes $750.00 difference in the value of any of these people's homes at Halethorpe, as compared up at Oaklee Station where they have one fare? A. Yes, sir.

Q. And the same thing in all these other suburbs? A. Yes, sir.

Q. At least that much difference and if it has two or three members it just makes all the people that have two or three members out of the market, in this section, doesn't it? A. Yes, sir.

(Mr. Benson) That's all.

NOTE: No cross-examination.

(Examination concluded.)

Thereupon—

MRS. WILLIAM H. TRESCOTT,

a witness of lawful age, produced on behalf of the Patrons of the No. 3 car line, having first been duly sworn, according to law, was examined and testified as follows:

DIRECT EXAMINATION.

By Mr. Benson:

Q. Mrs. Trescott, how many members of your family have to go to work each day? A. I have one, that's my husband and I have two children.

Q. They go to school? A. They don't ride simply because of the two fares. My husband is a machinist at Mt. Claire, makes $6.00 per day, and takes the reduction of the house, the liability insurance, and the interest, and I feel since I have been out there, I have got to put up the place for sale, because if he would ride the car it would be 30c a day and if my son goes to school that means how much a day? I send him clear to Elkridge and let him walk up there. He would only have to ride to Mount Street to the school that I would want to send him, and I feel that that's too much fare.

Q. In the Western part of the city? A. That's right. And you are no more than on the car when the motorman is on the car and comes and collects your fare and it's not worth it, and my husband works at the B. & O., walks to Halethorpe station to ride into Mt. Clare rather than pay all that car fare, because he has a mile almost to walk to pay that two fares, so we are just going to put up our house for sale, that's all and anybody can do any better than that on $6.00 a day, a machinist, and whenever the B. & O. wants to lay them off they will lay them off.

CROSS-EXAMINATION.

By Mr. Howard:

Q. You said he had a mile to walk anyway? A. Almost a mile from the Summitt Avenue to the Halethorpe line.

Q. Even if he rode he would have to walk that? A. Yes.

Q. You live a mile away from the Halethorpe line? A. Almost a mile, I guess from Summitt Avenue, is every bit of a mile.

Q. And where does he go to school? A. To Elkridge.

Q. How far is that? A. A couple of miles. That would be better than pay two fares and walk a mile besides, at the end.

Q. He walks there? A. Yes, sir.

(Mr. Benson) Nearly three miles.

(The Witness) Yes, but he would rather walk the three miles than pay 16c a day on the car line.

(The Chairman) That's a public school.

(The Witness) No, it's a parochial school.

(Examination concluded.)

Thereupon—

MRS. AGNES STROMBERG,

a witness of lawful age, produced on behalf of the Patrons of the No. 3 car line, having first been duly sworn, according to law, was examined and testified as follows:

DIRECT EXAMINATION.

By Mr. Benson:

Q. Mrs. Stromberg, you live at Halethorpe? A. Yes, sir.

Q. How many members in your family use the cars? A. Five children.

Q. Five children use the car? A. They go to school in the city.

Q. Whereabouts do they go? A. One goes to Seaton High, at Charles and 28th and three to the Monastery School at Irvington and one to Mt. St. Joe.

Q. Now those that go to the Monastery and Mt. St. Joseph's, they have to get off at Primrose Avenue and walk thru the cemetery, don't they? A. Yes.

Q. In order to simply have one fare? A. Yes, or else ride around which is two fares.

Q. If they had one fare to the City, they could go into the city to any of the city schools for one fare? A. And save the walk thru the cemetery.

Q. Your husband uses the cars also? A. My husband is in the insurance business in Halethorpe.

CROSS-EXAMINATION.

By Mr. Howard:

Q. Are those Parochial Schools free or do you pay for the children going there? A. At the Monastery School, I don't pay for the three.——There is tuition for Seaton and Mt. St. Joe.

(Examination concluded.)

Thereupon—

MRS. J. O'DONNELL,

a witness of lawful age, produced on behalf of the Patrons of the No. 3 car line, having first been duly sworn, according to law, was examined and testified as follows:

DIRECT EXAMINATION.

By Mr. Benson:

Q. Mrs. O'Donnell, you live at Halethorpe? A. Yes, sir.

Q. How many in your family use the cars daily? A. Three, two regularly, one once in a while, but to get to his business he would have to use it if he didn't have a car, but he uses the car rather than the street car on account of the fare.

Q. The two fares to Halethorpe is quite an extra burden to your family then? A. Yes, it is, and my neighbor has four that use the street car daily, regularly.

CROSS-EXAMINATION.

By Mr. Toole:

Q. Are there many people in that neighborhood that have three or four people riding on the street cars coming to work or to school? A. The majority of them have two but my neighbor has four.

Q. Are there many others that have three or four? A. Well, yes, there are others around would have three or four.

(Cross-Examination continued.)

By Mr. Howard:

Q. Mrs. O'Donnell, what make of car is that you use to save car fare? A. It's a Ford.

(Examination concluded.)

(Mr. Benson) If the Commission please, most all of these people are here, and I think most of the other testimony would be rather corroborated of those that have testified. I think practically everybody here today are people from Halethorpe, whom I think are willing to testify, but I don't think it's necessary to put any more on.

FOURTEENTH DAY.

(Omit entire day.)

FIFTEENTH DAY.

(Mr. Howard) Then if the bulletin is already in, of course, I don't offer it again.

And then in the second place Mr. Tingley read one passage from the testimony of Mr. Hoyt in the gas case. We desire to have all of Mr. Hoyt's testimony in that case, which I believe is No. 1915, we desire to have all of that considered as offered and in the record as showing the whole of what he said.

(Mr. Tingley) That's perfectly satisfactory.

Thereupon—

C. D. EMMONS,

a witness of lawful age, produced on behalf of the applicant, having heretofore been duly sworn according to law, resumed the stand in rebuttal, was examined and testified as follows:

DIRECT EXAMINATION.

By Mr. Howard:

Q. Now, Mr. Emmons, I want first of all to direct your attention to that part of the testimony which has been offered since you were on the stand which has reference to the possible effect on the number of revenue passengers that a variation of fare may produce, and People's Counsel Exhibit No. 19 was a tabulation that professes to be prepared from Electric Railway Bulletin No. 116. Have you got that before you? A. I have, yes, sir.

Q. Now will you tell the Commission in your own way what you have to say about that? A. In the first place, if it pleases the Commission, I think it stands to reason that almost any increase in fare must in itself show a decrease in revenue passengers for the reason that an increase in fare is generally put in at a time of declining passengers. For instance, at the present time we are losing 5%. Now if an increased fare goes in tomorrow because of our losing 5%, and day after tomorrow we still show a 5% loss, and a rate case next year comes

around, they will show us as having gotten a 5% loss because of the increase in fare, and that would not mean a fair statement at all; it would simply mean that a decrease in riders had caused the necessity of an increase in fare, and consequently if we had a 5% decrease tomorrow with an increase in fare I would say really there was no loss in passengers. If we had a 6% or 7% decrease, the additional one or two per cent might be said to have been caused by the increased rate of fare.

The same way with a decrease in fare the reverse is true. A decreased fare is generally put into effect when the riders are coming back or some condition exists by which a decrease can be given, so if we were making a 5% increase in revenue passengers today and were in position to decrease the fare, and tomorrow showed a 5% increase in revenue passengers, certainly no one could say that the decrease in fare had caused that increase in revenue passengers. That in general, Mr. Howard, is the statement.

Q. That's a general comment on the whole? A. Yes. Now this is also a fact; that while a company like ours has the duty of hauling passengers, and it's our desire to haul passengers, just as many as we can to serve the people as well as we can at the least possible rate, yet in order to serve the people we have to have the revenue. Now if like in Cleveland, the first exhibit here, it does show with an increased rate of fare they have 1.6% loss in passengers, and yet the company makes 14.2% increase in revenue. It seems to me that the increase in revenue then permits the company to serve the other 98.4% of the people riding much better than they would be without the change.

Q. Now Bulletin No. 116 that this is made up from gives the figures by monthly amounts, doesn't it? A. Yes, sir.

Q. Is there any way in which you can tell the general tendency and whether there is any change in the general tendency due to the increase in the fare better than by making a summary that has been made of this exhibit? A. Yes, we have made several charts to show those differ-

ent cities and towns as listed in Bulletin No. 116, which I think shows better than the bulletin itself.

Q. In other words, these charts show each month's results, don't they? A. Each month's results, yes, sir.

Q. And they show in each case the point of time where the change in fare took effect? A. That is right.

Q. So that by looking at the lines you can much better than from the table such as this tell whether there was any resulting effect due to the increase or difference in fare? A. Or it will show perhaps the cause of the need of an increase in fare.

Q. Have you those tables? A. Yes, I have one of the Twin City Rapid Transit, one of the Oklahoma Company and Androscoggin on the same sheet, one of the Birmingham Light and Power Company, one of the Dallas Railway and Terminal Company and the Nashville Railway and Light Company on the same sheet. Cleveland is so complicated with its ups and downs due to the automatic adjustment of fare that we did not prepare it, but we have later another sheet showing St. Louis and Cleveland.

Q. I think there are seven, if I have counted you so far? A. Yes. We have another one showing St. Louis and Cleveland and Baltimore jointly just to show the comparison of the trends of business in the different places. So Cleveland is shown on this later one.

NOTE: Chart above referred to is here filed in evidence and marked, "Applicant's Exhibit No. 26, Rebuttal."

Q. Now the first company that is listed in this Exhibit No. 19 is Cleveland, and I now have before me this chart which you prepared which shows Cleveland, St. Louis and Baltimore, doesn't it? A. Yes, sir.

Q. Will you explain that chart to the Commission and tell that what you think it shows? A. This chart begins in the year 1917 and extends through the year 1926.

Q. That's the same period as Exhibit No. 19? A. Yes. The top or white line shows Cleveland, the cross marks

show where the change in fare took place, ended or began, it shows whether there was an increase or decrease in fare. Now they say Cleveland is regulated by the service at cost plan so when their barometer fund reaches a certain point they automatically increase or decrease their fare.

On the first increase in fare you can see in the early part of 1918 in Cleveland that when there was a decreasing business it happened immediately after the next month, after the increase in fare there was an increase, then a further decrease of business necessitating a further increase in fare. This period happened to be during the flu period, so there is a marked drop with a very quick rebound to a point into the middle of 1919, and apparently the barometer fund had reached such a point that they could decrease their fare.

Immediately after this decreased fare, however, there is another sharp drop with another rebound until the latter part of 1919 with a very largely increased business and the barometer fund gave them another decrease in fare. With this decrease there was still a rising trend until the early part of 1920, when apparently, even with the rising trend, the increase in the expenses caused the barometer fund to fall to such an extent that they had an increase in fare. Immediately after that there was a drop in revenue passengers until in the latter part of 1920 the barometer fund caused another increase in fare, immediately after which there was another decline in passengers until the latter part of 1922, when the barometer fund gave a decrease in fare, the passengers going up and down between the middle of 1921 until the latter part of 1922. Then with an upward trend of passengers in the beginning of 1923 there is another decrease in fare with still an upward trend of passengers until later in 1923, when there was a marked drop in revenue passengers, causing them an increase about the middle of 1923 with a further increase in the latter part of 1923, which increase, and rate of 6c, or 5.59c—all of these having 1c transfer, I don't believe it's been marked on the exhibit—this last rate carrying them to the end of the period.

I am advised that Cleveland is about to make another

change in its rate due undoubtedly to the very end of this period, it being confronted with a declining business.

Now the curious part of these three curves—perhaps I'd better explain St. Louis first.

The St. Louis curve is not dependent on a barometer fund such as Cleveland is.

Q. Cleveland is complicated by that feature of that automatic adjustment you spoke of, isn't it? A. Yes, sir. The St. Louis curve is a condition somewhat as we experienced here. When they need an increased fare they have to go in and prove the thing. So they had an increased fare about the middle of 1918, with a falling business after that at the flu period, followed by an increased business until the middle of 1919, and they had two increases from 7c to then 8c with 7c, 7½ and 7 1-7c tickets, three different classes of tickets until the early part of 1920, when we go up grade, with an upward trend of business they had a decrease in fare which lasted until the end of this period, the business then in St. Louis being shown by the up and down trends in red.

At the present time St. Louis, with an upward trend of business, has changed its fare from 7½ to 8c.

The Baltimore curve is the bottom curve and the curious part about placing these curves together is the more or less similarity of the up and down trends, showing that the business in the various places are more or less alike. I think it's rather curious that in Cleveland their winter peak is considerably more than the winter peak in St. Louis or Baltimore due, I think, entirely to the severity of the Cleveland winters than the winters of Baltimore and St. Louis, and proving to my mind the effect of the automobile on riding.

Is that sufficient, Mr. Howard?

Q. In other words, then, you find a very considerable similarity between these curves, don't you? A. I think there is, yes.

Q. Indicating that general conditions prevail in all three cities where the cause of most of the changes— A.

Are very much alike. Seasonal changes and also changes due to automobile competition.

(Mr. Clark) Chiefly seasonal changes.

(The Witness) No, I would say the decrease is chiefly automobile competition.

(Mr. Clark) The similarity of these curves of up and down.

(The Witness) Are due to seasonal changes to a large extent. The curious thing is that Baltimore when it started in 1917 is so much below Cleveland and when it finishes up in 1926 the curve of Cleveland and Baltimore are not very far apart.

Q. What has been the trend of population in that time? A. I think Cleveland would claim it; has had a greater increase in population than Baltimore. Cleveland's fare on account of the conditions there has been lower than Baltimore's fare.

(Commissioner Harper) This column showing one hundred thousands means the daily ride?

(The Witness) The average daily ride, yes, sir.

Q. In other words, these curves are nothing more than the tables in that circular on which the exhibit of the other side was based. It's those tables reduced to curve form? A. That is right, yes.

Q. Now have you got the Twin City Rapid Transit Company? A. Yes, Twin City is the next one I have here.

NOTE: Chart above referred to is here filed in evidence and marked "Applicant's Exhibit No. 26-A, Rebuttal."

(The Witness) This shows that up to the middle of 1920 they had a 5c fare. During the early part of 1920 they had a downward trend of business, increased their fare to 6c, with an upward trend of business in the latter part of 1920, then an up and down with a general downward trend of business through 1921, '22, '23, '24 until the middle of 1925 with the 6c fare, they changed it to an

8c fare, giving the seasonal change of an upward trend at the end of the year, and in 1926 showing again a downward trend. I think the Twin City are now asking a change in rate.

Q. Of course that indicates a general downward course, but do you see anything in that plat to connect the gross with the successive increases in fare? A. I do not, no sir.

Q. The gross is a pretty uniform one, isn't it? A. It just goes up and down and with a general downward trend. And the change in rate is compelled to my mind by the need of the system due to the falling off of business. Apparently the 6c rate did not hold the business.

Q. In People's Counsel Exhibit No. 19 one item was the Birmingham Railway Light and Power and I think that an increase of fare was followed by a drop of 24.9% and a reduction of the fare by a rise of 28% was referred to. Have you got the plat of Birmingham? A. Yes.

NOTE: Plat above referred to is here filed in evidence and marked "Applicant's Exhibit No. 26-B, Rebuttal."

(The Witness) That statement I think is very misleading without the consideration of the jitney competition that happened during that period. It begins in this sheet with a 5c ticket nnd increasing business up to the middle of 1919, a change was made to the 6c rate with continued increasing business. In the beginning of 1921 the jitneys were allowed to operate in Birmingham to such an extent that they almost killed the street railway business and compelled, in the middle of 1921, the road to go into the hands of a receiver. Before it went into the hands of a receiver, however, it attempted to maintain itself by a change in the rate of fare from 6 to 7c. As soon as a receiver took it over he changed the rate from 7c to 8c, and with that change in rate it about held its own and began an upward trend.

(Mr. Clark) Not only 8c, but 8c, 15 tickets for a dollar.

(The Witness) Yes. It began to hold an upward trend until the latter part of 1923, when an injunction was issued against the jitneys and they stopped operating or

were compelled to stop operating on the lines of the street railways in the latter part of 1923. This made the passengers come back to the street railways to such an extent that they felt they could change the rate of fare again and they reduced the fare from 8c to 7c, 20 tickets for $1.20, or a 6c ticket 7c fare against an 8c fare and 6 2-3c ticket before. Since that time they apparently had a little upward trend. The receivership, as you notice was lifted in the early part of 1924, but the entire story there to my mind is the question of jitney competition, at first a loss and after a gain.

Q. In other words, the period of the jitney competition there fills the depression, which was the cause of a certain slump at one time and an equally certain rise at the other? A. Yes, sir.

Q. You have noted on this plat the different dates when these various occurrences happened, haven't you? A. Yes, sir, I have.

Q. Now would you file the remaining ones and if you have anything separate to say about them——

A. There is the Oklahoma Railway and the Androscoggin and Kennebec Railway on the same sheet. The latter I think should remark is only a small road with a lot of interurban service connecting small cities and the automobile competition has about killed that class of road all over the United States.

NOTE: Chart above referred to is here filed in evidence and marked, "Applicant's Exhibit No. 26-C, Rebuttal."

(The Witness) The Oklahoma apparently was changed from 5c to a 7c rate on a downward trend of business, from 7c to an 8c rate on a further downward trend of business with the effect even that the 8c rate showed an upward tendency of business. What I am trying to show is, as I have said before many times, I think the question of change of rate in itself is more or less immaterial as to the effect on riding. It depends entirely on the competition of automobiles, the trend of business at the time the rate change is made.

The Dallas shows that with a 5c fare up to the middle of 1920 a change of 6c fare at that time and there has been a gradual increase in business since that period up to the latter part of 1925 with a falling trend in the early part of 1926 at which time they raised the fare to 7c, 5 tickets for 30c, which really is not much of a change because it still is at a 6c ticket rate. Dallas claims that in that period from 1920 to 1926 they gained 5% in population.

Nashville shows with a 5c fare up to the month of April, 1920, they changed then to 7c, 4 tickets for 25c, on a declining trend of business until April, 1921. They then changed to a 7c rate, 5 tickets for 35c, and have held a very steady rate of passengers since that period claiming at the same time that they have gained 16% in population from 1920 to 1926.

NOTE: Chart above referred to is here filed in evidence and marked, "Applicant's Exhibit No. 26-D, Rebuttal."

Q. There is one company I believe not included in the plats, the Connecticut Company of New Haven. What sort of a road is that? A. The Connecticut Company of New Haven, that is their home office, is a city and interurban company operating throughout the State of Connecticut, operating in New Haven, in Bridgeport, in Hartford and a great many cities and towns and with connecting roads between.

Q. It has a large element in it then? A. A large interurban element in it, and they have made some various experiments in various rate changes, at one time going back to a 5c fare to see whether that would actually make any change, and this was done under the supervision of the Public Utilities Commission, as they are called in Connecticut, with the result that after I think a four months' test the Public Utilities Commission had them go back to their old rate.

Their condition is quite complicated because of the fact that they tried out a great many different rates of fare with radical zones and it's been rather hard to get any definite curve for them because of the various rates they have.

Q. And frequent changes in zones? A. And frequent changes in zones and the radial system. I have a very voluminous report about the whole thing. It is so complicated that I hardly think it is worth while to try to go through it.

Q. You didn't find anything in it at all to indicate any great change in number of riders resulting from changes in fares though, did you? A. No, there are several statements in here that show that in their opinion first that the flat fare inside of the city limits is essential, that the radial zones is not a workable thing, and second that the question of a change in the rate of fare did not materially affect the change in riding.

Q. Now if there is nothing more, Mr. Emmons, you want to add to the results in other cities on the variation of the fare I will go on to something else. A. There are a lot of quotations I might read from this report but I don't think it is necessary to encumber the record with it. I have given the gist of it.

Q. Now People's Counsel Exhibit No. 20 was a tabulation professing to show the effect of fare changes on the revenue passengers on your Charles Street bus line. Have you got that? A. I have, yes.

Q. Have you had prepared a plat or chart illustrating what you are going to say about that? A. Yes, sir. We have a chart showing on the chart both the Charles Street bus line and the Mt. Royal bus line.

Q. Why do you put the Mt. Royal bus line on the same chart? A. Because the Mt. Royal bus line was the one that made the effect on the Charles Street line.

Q. How so? A. It went in to serve, into operation just at the time that our attention was called to the fact that the Charles Street line was beginning to lose passengers and it began taking passengers from the Charles Street line by running it down Charles Street. They are identical from Mt. Royal Avenue to Redwood Street.

Q. From Mt. Royal to Redwood they were absolutely identical? A. Yes, sir.

NOTE: Chart above referred to is here filed in evi-

dence and marked, "Applicant's Exhibit No. 27, Rebuttal."

Q. Now this Exhibit No. 27, Mr. Emmons, is a plat or chart showing fluctuations in revenue passengers. That's number of riders, isn't it? A. It is, yes, sir.

Q. Number of pay riders on your Charles Street bus line and on your Mt. Royal bus line? A. That's right.

Q. And they both, the spaces are drawn to a similar scale of proportion, aren't they? A. They are, yes, sir.

Q. The same chart also shows when the fare changes took place, doesn't it? A. Yes.

Q. Explain to the Commission what, if anything, that exhibit shows? A. The exhibit shows that with a 5c fare on the Charles Street bus line up to the latter part of 1919 the first change was to 6c.

Q. Does it show any noticeable result in the number of riders with a 6c change? A. It about holds across there with a seasonal change, a little bit lower in the summer time, but about the same where it ended. Then there was a change to 6½c on a downward trend of business.

Q. That's a downward seasonal trend at that time, isn't it? A. Yes. And then it changed to 7c carrying through until July 1, 1922.

Q. Does it show any falling off while it's on the 7c basis? A. No, it really shows an increase in the peaks. There is an increase in the peak in 1921. The peak in the latter part of 1921 is above the peak in the latter part of 1920, and the peak in the early part of 1921 is slightly below the peak in the early part of 1921.

Q. How about the lowest point in 1922, is it above or below that in 1921? A. The lowest point in 1922, I have got the figures here. When the fare rate was changed we were hauling in June, 1922, 180,000 passengers and in June, 1921, we hauled 148,000 passengers, so the June month at 7c was higher than the June month at 6c.

Q. The curve shows every month, doesn't it? A. The

curve shows every month and also I have the figures, because they are a little more definite in some places.

Q. Now when does the competition of the Mt. Royal bus line enter into the picture? A. On December 1st.

Q. That's shortly after the installation of the 10c fare, isn't it? A. Yes. But I think before we get to that, Mr. Howard, we should again repeat what you brought out the other day, the fact that immediately after the installation of the 10c fare on July 1, 1922, instead of showing a decrease the Charles Street bus line showed in July, 1922, 157,000 passengers against 122,000 in July, 1921. In August, 1922, it showed 136,000 passengers against 131,000 in 1921. In September, 1922, it showed 166,000 passengers as against 153,000 in 1921. In October, 203,000 passengers as against 193,000 in 1921. In November it did show a decrease because at that time the Mt. Royal bus came across Charles Street to St. Paul. Prior to this time, while it went on the 1st of July, prior to this time it went down Cathedral Street.

Q. Cathedral is only one square from Charles? A. Yes, but when it came across Mt. Royal to St. Paul then it began to pick up Charles Street passengers who did not walk over to Cathedral Street.

In November then it showed a drop from 194,000 in 1921 to 181,000 in November, 1922.

Then December began the real competition between the Charles Street and Mt. Royal buses, because the Mt. Royal bus was routed down Charles Street, and then it showed a loss in passengers on the Charles Street buses from 212,000 in 1921 to 178,000 in 1922, but the Mt. Royal bus in that time carried in December, 1922, 53,720 passengers.

Now if we follow the curve on through you will notice a continuous increase on the Charles Street buses in revenue passengers with the 10c fare and also a continuous increase on the Mt. Royal bus line with the 10c fare.

Q. And if you superimpose the one increase on the other you would have an approximate steady growth for the whole period, wouldn't you? A. For the whole period for both lines.

(Mr. Howard) I will file with the stenographer and call it Exhibits 27-A and 27-B, the detailed figures on which this chart is based.

NOTE: Detailed figures above referred to are here filed in evidence and marked, "Applicant's Exhibit No. 27-A, Rebuttal and Applicant's Exhibit No. 27-B, Rebuttal."

Q. Now, Mr. Emmons, something was said by the other side about the East Fayette Street bus route as illustrating this proposition about the mere effect or close relation between fares and number of passengers. That was their Exhibit No. 21? A. Yes.

Q. Have you any chart to illustrate that? A. I have a chart showing the Fayette Street bus line operation and also the No. 23 and No. 26 car line operation which should be used in rebuttal to this.

NOTE: Chart above referred to is here filed in evidence and marked, "Applicant's Exhibit No. 28, Rebuttal."

(The Witness) This, Mr. Commissioner, to my mind is only another way of showing one-half of the story and making it look as if it were one way when the real picture is quite different. The fact is that the East Fayette Street bus route between November and December showed a large jump in passengers due entirely to the re-routing of the cars which was ordered by this Commission itself and which took effect on December 1, 1926.

That rerouting took the cars off of the east end of Monument Street and also took the No. 3 car line off from that district, and shows that the result of it is reflected not only in the revenue passengers on the East Fayette Street bus route but also is reflected in the number of revenue passengers carried on the No. 23 and No. 26 car lines.

Q. Let me ask you a question just there. Is the volume of traffic, the number of passengers on car lines very much greater than the number of passengers on a bus line as a rule? A. Very much, yes, sir.

Q. So the relatively slight number deflected from a car line would cause a proportionately great increase on a bus line, wouldn't it? A. Comparatively, yes, sir.

Q. Your heavy traffic is carried by cars, is that right? A. That is right. I think that's all the explanation that is really needed there. The fact that this statement was given may be correct in itself, but it is in a statement that shows the true picture because of this change of the routing as required by the Commission.

Q. So, in other words, the true picture of the comparison of your Fayette Street Bus line with your Charles Street Bus line should have added to it, in order to be a true picture, this story of the result of rerouting of the street car lines? A. Yes, and at the same time the Charles Street Bus line and Mt. Royal also under a 10c fare shows an increase in riding.

Q. Now People's Counsel Exhibit No. 22 professed to be a comparison by curves of the average fares on your railway and also an average wholesale cost of commodities. You recall that exhibit, don't you? A. I do.

Q. Have you prepared an exhibit that you have prepared along similar lines? A. I have, yes, sir.

NOTE: Chart above referred to is here filed in evidence and marked, "Applicant's Exhibit No. 29, Rebuttal."

Q. In the first place, Mr. Emmons, refer to the other side's exhibit, People's Counsel Exhibit No. 22. Have you any comment to make on that as to the statement that that's a comparison of the cost of living with car fares in Baltimore? A. Well, this isn't the cost of living. I think Mr. Wolf admitted on the stand that there was a difference between the cost of living and the all commodities wholesale prices.

Q. What has he selected as the basis for comparison, a high or low subject? A. My recollection is Mr. Wolf said he had a great number of curves and he selected the one that seemed to fit the condition best. It looks to me that it might fit it worse. It might fit it best from his

viewpoint, but certainly it fitted worse from our viewpoint.

Q. You mean he selected the lowest? A. He selected the lowest, yes.

Q. Now what have you put on your exhibit that has just been filed? In the first place you have the fare curve? A. I have shown Mr. Wolf's curve of the all commodities prices after making the drop that he gave has shown a sharp rebound at the present time, so that instead of being about 144 as he entered it it is really now about 149.

I have also shown on this United States Bureau of Labor statistics cost of living in Baltimore.

Q. Now are those official figures? A. These are official figures from Government reports. It shows about 176.

I have also shown Untied States Bureau of Labor statistics Union Labor wages which has gone up above 340.

I have also shown our own curve of platform wages and maximum hourly wages which has gone up to about 224.

I have also shown the curve of our own operating expenses per car mile which has gone up over 210, about 211. I think this is really the picture of curves if that is to be shown.

Q. Now the only curve on there that is entirely identical with any on the other side is the average fare curve. That's the same, isn't it? A. That's right, yes.

Q. And the wholesale commodities differ only in that you have brought it up to what time? A. Up to about January 1, 1927.

(The Chairman) Mr. Emmons, on your chart here you show a very marked jump in your rate of average fare from 150 to 200. That follows out Mr. Wolf's idea that if the increase is granted it will reach that figure?

(The Witness) That's right, yes.

(The Chairman) Or increase asked for.

Q. Let me ask you again, Mr. Emmons about the end of the wholesale commodity curve. Has that been figured by months? A. Yes, that's been figured by months.

Q. So it's later than January 1st? A. These are October figures for the wholesale commodities?

Q. At any rate, Mr. Emmons, wholesale commodities are up how many points since the period Mr. Wolf stopped his calculation? A. Up approximately five points.

Q. Anything more you want to say about that, Mr. Emmons? A. That's all I think need to be said. I might say on that wholesale commodities thing, Mr. Howard, that while the average is shown on Mr. Wolf's scale or our revised scale there are some articles in it, in looking over it, there are some 46 articles that are considerably over 200%, so that the average of 500 and some articles that they pick certainly is not a fair criterion of what one certain article is. For instance, we find some that are up to 300, 323, 294. There are 46 that are over the 200%.

(Commissioner Harper) It depends on the weight you give to the articles.

(The Witness) These are separate articles in themselves, and of course when they are all weighted we get this 149 which we have, but he is comparing those 550 weighted articles on the basis of 149 with our one specific thing of a rate. Now as I say in that 550 articles there are 46 of them that in themselves are over 200%, so if you are going to take one article it's quite different from the average of 550.

Q. And you mean you are not an average consumer of average wholesale commodities? A. We are not.

Q. You have your own needs? A. Yes.

Q. And I think in your testimony that was gone into.

Now People's Counsel Exhibit No. 24 was a tabulation of what the present fares are in cities that have a population of over 100,000 inhabitants. Have you got that?

A. Yes. I would like to check this with Mr. Wolf. That was based on A. E. R. Bulletin No. 116?

(Mr. Wolf) The same article that was in the Journal for October.

(The Witness) Now they have a new bulletin, No. 163, with a supplement. This new bulletin is dated October 1, 1927, and they have a supplement out dated November 1, 1927. Have you those?

(Mr. Wolf) I had those but I didn't use them.

Q. Will you give the Commission any information that that later bulletin has which you think bears on this question? A. In the first place I want to say this; that while Mr. Tingley and Mr. Wolf have taken Boston out of the 10c flat fare cities because in some places in the small communities they have on limited routes 4 tickets for 25c. Boston is really more of a flat fare city, flat fare 10c city than we would be on the 10c because of the fact that we propose, on the 10c fare, to have children's half fare for 5c, a school ticket of 5c, and commutation rates at less than 10c.

Q. So you would be less of a flat fare city than Boston? A. Yes I would say we would.

Q. If you got all you asked for? A. I would say we would. I have this from the late bulletin; that the trend of fares over the United States has been upward since July 1, 1923, and is continuing upward. On October 1, 1927, the average fare of 272 cities reporting was 7.9516c and November 1, 1927 the average fare was 7.9846c, which is the highest average fare that the street railway industry has ever had not excluding the War period.

There are at the present time, or since the November bulletin, there have been twelve different cities that have changed the rate of fare. There are three interurban roads that have changed the rate of fare. At the present time there are fourteen fare cases pending.

Q. What are the direction of those changes? A. The changes are all up with the exception of a municipal city which has put in a weekly pass, and the information

here does not say about the flat fare. I presume it's the same, a flat fare with a weekly pass. I think they give a statement that there are only, I have forgotten, of basic 10c fare cities, but my statement here is that there are—I got this morning, dated November 26th, from New York—this gives 219 United States cities.

Q. Having a basic fare of 10c. A. That's right, yes.

(Mr. Tingley) Those are not cities of over 100,000?

(The Witness) No, but I counted the cities of over 100,000 in this and there are 31 cities of over 100,000 that have a basic 10c fare.

(Mr. Tingley) We show 30 on the exhibit.

(Mr. Clark) But Boston only having a flat?

(The Witness) There are 30 cities that have a flat 10c rate. If you want me to read them I will give them to you.

(Mr. Clark) Without any tickets?

(The Witness) Without any tickets at all except maybe like Boston as those from local lines of 4 for 25c, but they are not down in the city, and to my mind they do not exclude Boston in any way from the flat fare 10c cities.

(Mr. Tingley) Suppose you read them, Mr. Emmons, to get them in the record.

(The Witness) Berwyn, Illinois. I can give you the populations, too, if you want them.

(Mr. Tingley) Yes, suppose you do.

(The Witness) Cicero, Illinois, 65,400; Forest Park, Illinois, 10,768; Maywood, Illinois, 12,072; Oak Park, Illinois, 53,500; Auburn, Maine, 16,985; Bangor, Maine, 25,978; Bath, Maine, 14,731; Lewiston, Maine, 35,500; Villercia, Massachusetts, 3,646; Boston, Massachusetts, 787,000; Braintree, Massachusetts, 10,580; Concord, Massachusetts, 6,461; Framingham, Massachusetts, 17,033; Holyoke, Massachusetts, 60,400; Lexington, Massachusetts, 6,350; Natick, Massachusetts, 10,907; Needham,

Massachusetts, 7,012; Newburyport, Massachusetts, 15,518; Newtonville, Massachusetts, 5,700; Wakefield, Massachusetts, 13,025; Waltham, Massachusetts, 35,700; Wellesly, Massachusetts, 6,224; Woburn, Massachusetts, 16,574; Worcester, Massachusetts, 193,000; Morristown, New Jersey, 12,548; Ocean City, New Jersey, 3,721; Lackawanna, New York, 17,918; Mauchnuck, Pennsylvania, 3,666; West Chester, Pennsylvania, 11,717.

(Mr. Tingley) Do you know offhand how many of those are served by elevated railroads, Mr. Emmons?

(The Witness) Cambridge and Brookline and the others are not in here, because they are part of the Boston system and because they have these local fares. I think Forest Park and Oak Park and these Illinois towns are served by the Chicago Elevated Railways.

(Mr. Clark) How many states now have you cited there?

(The Witness) Six states.

(Mr. Clark) Only six states?

(The Witness) Six states. There will be fifty-three some of these days, Mr. Clark.

Q. Mr. Emmons, in reference to the comment that has just been made on some of these, being cities of small size, which can stand the fare increase to a flat 10c basis better from the standpoint of the economic limit, a small town or a large town? A. The larger city without doubt.

Q. Why? A. Because of the fact that in the smaller cities the people can walk.

Q. They don't get as much for their money? A. They don't get as much for their money, and people can walk. I might also call attention to this in this bulletin also; it shows in 1927 out of 64 fare changes 60 of them have been fare increases.

Q. There was an exhibit filed by People's Counsel consisting of a brief summary of what various financial institutions and other things were said to predict about the future course of business. Have you any comment

to make on that? A. Exhibit No. 26, yes sir. Well I have this comment. In the first place I think the employment situation has very little to do with the question of our own pocket or the question of the future, for the reason that employment, there isn't such a great amount of unemployment at the present time, and there is not much prospect for change. The second thing Mr. Wolf refers to is weather conditions.

Q. We haven't summoned the proprietor of the Hagerstown Almanac have we to show us next year's weather conditions? A. But this is last year's. I have gotten meteorological pamphlets and have put together a statement of the ten months of 1926 compared with the ten months of 1927, and we can't get much comfort for our decrease out of that, because it shows that there were 103 clear days in 1927 as against 114 in 1926.

Q. You mean up to this time of the year? A. Up to the 1st of November this is.

Q. You are not adding any estimates? A. No, I am not. It's hard to tell what the weather is going to be. I am not a weather prophet.

Q. So if you take the year as a whole so far the weather conditions have been very much alike with respect to clearness and cloudiness? A. I was going ahead. Partly cloudy there were 89 this year as against 84 last year, and now when I say part cloudy days I mean clear in the morning and cloudy in the afternoon or vice versa, there were 112 this year as against 115 last year, and the rainy days of .01 inch precipitation.

Q. Is that your test of a rainy day or the Weather Bureau's? A. It's the Weather Bureau's. They have two, .01 inch and ¼ inch. I will give the ¼ inch next. That is .01 inch precipitation is very little rain that day, is 112 this year as against 110 last year, against real rainy days, which really would affect business, it was worse last year than this, having 15 of the rainy days of ¼ inch or more precipitation as against 38 this year. The total sunshine hours showing 2,307 in 1926; 2,222 in 1927. I don't believe that would affect riding very much.

Q. So your comment on weather conditions from a street railway standpoint for the two years, 1926 and 1927, would be what in a word or two? A. Would be the weather conditions has had no detrimental effect one way or the other.

Q. Because they were very much the same? A. Very much the same, yes sir.

(Mr. Clark) Did we have this kind of a fall last year? I don't remember it.

(The Witness) I didn't go into November and November this year is going to be better than last and yet we are showing 5% decrease.

His third reason is the automobile competition and there I feel we have the real answer to our difficulty. We have already given an exhibit of the increase in licenses. In looking up the question of cabs and hacks which are really great competitors of ours we find that in the last 20 years, from 1907 to date, the total cab and hack licenses increased from 233 to 4,135.

We find that the gas tax has shown the use of gasoline in increasing proportions, from a gasoline expenditure in 1925 of 4,000,545.

Q. That's within the State of Maryland? A. That's within the State of Maryland. 1926, 4,000,999, with an estimated expenditure of 5,000,499 in 1927.

Q. Whose estimate? A. This is estimated by the Highways Engineer and the Automobile Commissioner, a joint estimate of theirs. They estimate a further increase in 1928 of 5,000,844, and in 1929 of 6,000,136.

Now the actual use has exceeded the estimates in 1925 and '26, and if their estimate carry on that way they will exceed in these other years.

Q. In that connection have you had prepared a table showing the number of gallons of motor fuel sold and used in this State? A. Yes, sir.

Q. On which taxes were paid? A. Yes, sir.

NOTE: Statement above referred to is here filed in

evidence and marked "Applicant's Exhibit No. 30, Rebuttal."

Q. Mr. Emmons, isn't there a lower gasoline tax in some of the adjoining states? A. Yes, in Delaware there is a 3c tax, in Pennsylvania there is a 2c tax, in the District of Columbia a 2c tax, in New Jersey there is no tax, in West Virginia is a 3½c tax.

Q. And that as compared with the Maryland tax has had effect on the consumption in this State on the purchasing of gasoline? A. Some possibility of decreasing the purchases here. I have heard some people state that they went over the line to get gasoline so as to save the taxes.

(The Chairman) What is the Virginia tax?

(The Witness) 4½c is the Virginia tax. That might have some effect. At least it wouldn't increase the amount used here.

(Mr. Tingley) Would it have the same effect as an increase in fare on passengers?

(The Witness) If they could go across the line and get it cheaper it might.

Q. Is there any further explanation of that exhibit? A. This is in gallons instead of dollars and it shows a gradual increase from October 31, 1923, from 67,000,000 to 85,000,000 for the year ended October 31st, 1924; to 97,000,000 for the year ended October 31st, 1925; to 107,000,000 for the year ended October 31st, 1926; to one hundred and practically twenty-one million for the year ended October 31, 1927.

(The Chairman) The consumption has been growing by about 12% a year.

(The Witness) 10 to 12% a year. In the last four years pretty near 80%.

Q. Does it show any symptom of having reached the peak? A. It does not. These estimates look like the State officials do not think it has reached the peak.

Q. Whose figures are these, by the way? A. These

are from the Treasurer of Maryland computated from the receipts of the Treasurer of Maryland and from the Motor Vehicle Gasoline tax.

(Mr. Clark) What's the purpose of this exhibit?

(The Witness) Just to show the increasing use of the automobile. We are still contending and we feel we are absolutely right that the automobile is the cause of our trouble.

(Mr. Clark) The use of the automobile and not the number in use then?

(The Witness) The number in use means the use of them.

(Mr. Clark) Not necessarily, because the riding habit is increasing probably.

(The Witness) People don't buy them to let them stay in the garage.

(Mr. Clark) The riding habit is increasing and while it shows the increase in the use it is not necessarily in the number.

Q. Mr. Emmons, there was some reference in the summary of what the President is supposed to have said in People's Counsel Exhibit No. 28, some reference to the increase in the use of automobiles as being a factor in the loss of railroad revenue. Can you illustrate that by any examples that you have before you? A. Yes. I have the Twenty-Sixth Annual Report of the Maryland and Pennsylvania Railroad Company which shows in the statement a gradual decrease.

Q. Instead of giving it year by year, what was the revenue in 1921? A. In 1921 their passenger revenue was $107,000; 1926, $55,000, just about half.

Q. And is the change a progressive one between those figures? A. Entirely so. One hundred and seven is the first figure; 1922 is ninety-four thousand; 1923 is eighty-six thousand; 1924 is seventy thousand; 1925 is sixty-four thousand and 1926 is fifty-five thousand.

Q. And prior to the first year you have taken there

was the passenger revenue increasing or decreasing? A. It was increasing from 1917 up to 1920; there was an increase.

Q. Have you any figures throwing light on the same matter from the B. & O.? A. I might call attention to the statement in the report saying "the decrease in passenger revenue reflects the continuing increase from year to year in the number of privately owned automobiles and the use thereof by the former patrons of our trains." That's the Maryland and Pennsylvania statement.

In the B. & O. report in their traffic statistics by years it shows somewhat similar; that from the year 1920 there has been a gradual decrease in revenue passengers beginning with twenty-five million in 1920, 21,000,000 in 1921; about 18,000,000 in 1922; about 18,000,000 in 1923; about 17,000,000 in 1924; about 15,000,000 in 1925 with 13,000,517 in 1926.

In another portion of their report, in giving the average distance haul per passenger, we find in those same periods a gradual increase in the length of the distance haul, so the inference to my mind is that while they have been losing passengers they have been losing the short haul passengers, and the passengers retained are the long haul passengers, because this distance showed a gradual increase from 41.82 miles in 1920 to 65.80 miles in 1926.

Q. And during that same period the B. & O. as a whole has shown a healthy condition of growth, hasn't it, due to its freight business? A. It has, yes.

(Mr. Tingley) Is that true for 1927, Mr. Emmons?

(The Witness) I haven't any statement for 1927.

Q. Mr. Emmons, People's Counsel Exhibit No. 35 professed to be an attempt to carry your prediction forward to the end of 1930. You remember that, don't you? A. Yes, I do.

Q. Is that a fair application of your——

A. I do not think so. I did say in my testimony we have been having some continuing decrease and I ex-

pected a decrease in 1928. I didn't propose to indicate that I was prophesying for 1929 and 1930.

(Mr. Tingley) The record shows it.

(The Witness) Not that I could find.

(Mr. Tingley) I can find it for you.

(Mr. Howard) What does it show?

(Mr. Tingley) That he anticipated a further decline for 1929.

(The Witness) That must be a mistake. I never had in mind trying to anticipate anything beyond 1928.

Q. You didn't for instance mean to predict that in 33 years your passenger revenue would be zero? A. I certainly did not.

Q. Which would be the result of carrying that same process further.

(Mr. Tingley) Where do you think it will stop, Mr. Emmons?

(The Witness) I haven't any idea. If Mr. Brannon's effect of the automobile down town——

(Mr. Tingley) Won't it stop until that is regulated?

(The Witness) I think there is bound to be some saturation. Now where that is, Mr. Tingley, I am not prepared to say.

(Mr. Tingley) It might just as well be 1935 as 1928?

(The Witness) No, I have been optimistic in the last few years that we had reached the saturation point. I have lost some of my optimism for this year and next year. I don't think we can go very much further. I think some of these families are some day going to figure up their costs and find that even a 10c fare is vastly cheaper than an automobile.

Q. In that connection, Mr. Brannon criticized the position of the Company to stop the parking of automobiles? A. I wish we had some ability to do it. We have been represented in traffic survey after traffic survey, all of

which have made that recommendation, and when it came to the last traffic survey of Kelker & DeLeuw the recommendation was again made, and it was just part of the whole thing. We ourselves went to the only expense and went to the only effort to try to carry out any recommendations in that traffic survey in re-routing a group of our lines, and we said at that time that we felt there should be some co-operation if we went to that expense and did anything at all in carrying that out; we should have some co-operation. We re-routed all of the group No. 1, so-called.

(Mr. Tingley) That was done under order of the Commission?

(The Witness) That was done under order of the Commission and the Commission have no control of the automobile traffic and I think they would help the situation themselves, but for the present time it's absolutely in the control of the Police Commissioner as it used to be, so I see no way that we can help the matter. I only wish we could.

I really do feel, Mr. Howard, that it's a grave mistake that the 80% of the people that ride, trying to get transportation in this town, should be so seriously held by the other 20% who are able to buy a more expensive transportation, a more exclusive one, and yet they use all the streets for their own benefit to the detriment of the 80% of the population that are trying to get home.

(The Chairman) I think we can all agree on that, Mr. Emmons, but we can't do anything about it.

(The Witness) Quite right. I am sorry.

(Mr. Tingley) Except ride the cars ourselves which most of us don't do.

(Mr. Clark) But that wouldn't have any bearing on a trip from the outlying section down town, and there is just as much complaint about the inbound traffic as the outbound.

(Mr. Howard) What wouldn't have any effect on the inbound service?

(Mr. Clark) the congestion down town.

(Mr. Howard) You feel that only effects outbound service?

(Mr. Clark) No, I say that congestion isn't in the outlying sections of the city.

(Mr. Howard) You mean for instance at North Avenue and Charles Street there is no such situation?

(Mr. Clark) Just at that point there may be a little.

(Mr. Howard) They say more automobiles pass there than any point in the city.

(Mr. Clark) They don't have the congestion they have down town. You go up there and you won't find the street cars are held up to amount to anything.

(Mr. Markell) They had a photograph in the paper the other day saying that was the busiest place in town.

(Mr. Howard) Some people say that is the new center of the city.

(The Chairman) You can't hold up traffic in one section of the city without affecting it in some other section of the city. You can't tie up traffic either going in or going out without having it affect the whole line.

Q. Mr. Emmons, People's Counsel Exhibit No. 36 was a comparison of your operations in 1927 with your operations in 1922. Why was 1922 selected for that base, do you think? A. That's another place that Mr. Wolf tried to make the best picture he could, which he did. 1922 is the lowest year we have from 1919 on.

(Mr. Tingley) It's the most comparable figure though in these figures.

(The Witness) I don't think it is, no. I think he just made the best picture that could be made. I do want to say this; that the picture isn't fair in a good many ways. It isn't fair because it was taken that way.

(Mr. Tingley) We will show why he took it later, Mr. Emmons.

(The Witness) He also does this. While he takes $1,200,000 of economies off of our operating expenses he doesn't give credit to the fact that part of those economies to the extent of over $100,000 are already included in the other figures of 1927 so it's repeated by that much.

Q. Let me make that clear. You had estimated that you had accomplished economies of $1,200,000? A. The economy figure was $1,800,000, but that went back to 1918.

Q. Part of those economies consisted of a reduction in expense, is that right? A. Yes.

Q. Did any part of it consist of a reduction in taxes? A. Yes, part of it consisted of a reduction in taxes.

Q. And did any part of them consist of an addition in revenue? A. Part of them consisted of an addition in revenue.

Q. And your present criticism is that he has treated the whole here as if it were all changed in Operating Expenses alone, is that right? A. Yes, sir. And also he made no allowance for the termination of the 1911 power contracts in 1926, which added materially to our power costs, and while he has given a three per cent. increase in cost of operation against a three cents per hour in wages, the cost of operation is really more than that.

I don't think there is much in this comparison. He made no allowance either for the $315,000 which we feel is absolutely necessary for the question of taking care of the increased accident cost, the increased power cost and increased taxation. If you take that 315 from here, from the 1139 it will give you 834 as against his 799. If you take the $100,000 off that was included in the other accounts would bring it down to about his figure.

Q. Now, while we are on that topic there were some exhibits offered by Mr. Clark with the apparent purpose of showing lack of economy. Have you anything generally to say about them? A. If you want to go over them now I can very easily make an analysis of all those. It goes back to a year when the operation was most severely criticized and lack of supervision and there are

naturally reasons for all the changes. Again Mr. Clark in taking 1916 took the lowest year of employees that the Company I guess ever had.

Q. Suppose you take these exhibits up that you referred to and tell the Commission what you have to say about them.

(Mr. Clark) That's where you started in your information to me, 1916. That's the reason I took it. I could have taken 1917 and shown a better result.

(The Witness) We gave you what you asked for.

(Mr. Clark) I didn't know that when I asked for it. If that was an unfair year to compare with 1927, I apologize. It was absolutely accidental.

(Mr. Tingley) Any year you take is unfair, Mr. Clark.

(The Witness) There is quite a difference in the picture shown by certain years, Mr. Tingley. The 1916 total monthly payroll shows 359, while 1917 shows 422 total; 1918, 452; 1919, 535; 1920, 533; 1921, 539; 1922, 515; 1923, 516; 1924, 533; 1925, 551; 1926, 561; and 1927, 560. Now, taking Mr. Clark's exhibit——

Q. What number of Mr. Clark's exhibit have you before you Mr. Emmons? A. No. 9. He shows an increase for instance in the Superintendent of Transportation, increase from 68 to 105. Again I must say that in 1916, the supervision was entirely too little, and since that time the additions have been made of the various employees. There has been a supervisor of motormen with 5 instructors of motormen, one instructor of conductors. That's a mere matter of giving safe service, of operating a car economically and comfortably.

Q. Are they instructors or green hands? A. They are, yes.

(Mr. Clark) How did you do it before? The motormen are not any better now that they are before.

(The Witness) We think they are, Mr. Clark.

(Mr. Clark) And yet you have more accidents.

(The Witness) We don't have more accidents. We

have more accident cases, we don't have more accidents, and it is to be presumed we would have more accidents with all the number of automobiles we have here in town. Our accident ratio per ten thousand car miles is less today than it has been any time since 1919, but our accident costs have gone up.

(Mr. Clark) Because as you say the jury takes into consideration the cost of living?

(The Witness) I don't know. All the reason a jury gives is the man is earning more and consequently is entitled to be reimbursed after his time off. Hospital bills are double what they were, doctors bills are double and nurses bills are double and everything else, all of which we have to pay for.

Q. Even lawyers cost more? A. Even lawyers cost more.

(Mr. Clark) Exhibit No. 8, which is the exhibit on which this Exhibit No. 9 is based shows that you haven't treated the Law Department as well as your other departments. You see I never discussed that at all?

(The Witness) That's too bad.

(Mr. Clark) Very little increase in 1927 over 1926?

(The Witness) That may be. In order to better service we have found it necessary to have our street inspectors increased from 21 to 37 just to take care of situations like was complained of this morning by Mr. Clark's witnesses. These street inspectors are all over town, and if a block occurs they are supposed to get there as quick as they can to detour the cars around the block just as quick as they can possibly detour them. We have in order to save on power, get an economical use of power a Power Record Department which is now employing six men.

Q. What's that under? A. That's under the Superintendent of Transportation. All of these are the increases making up from the 68 to 105. We have the Safety First Department which has shown splendid results in the reduction of accidents per 10,000 car miles.

We have an increase of three men in that. We have an increase of two due to employment of female conductors. We have an increase of one due to the establishment of the Lost and Found Department; one due to Caretaker at Overlea, and five due to a Police Department to properly police our service. That makes the total of the increase from 68 to 105. We think it's perfectly justifiable and if necessary in the interest of good service.

(Mr. Clark) What did you say about the police?

(The Witness) We have a Chief of Police and four police in order to police our service for the safety of our riding public.

(Mr. Clark) I didn't know you had a Police Department?

(The Witness) We have a Police Department. Quite essential too. They go any place that there is likely to be any disturbance on the cars. They are at the parks in the summer time. If there is a big crowd of people that are coming to the City they go there and they go any place where they might be needed.

(Mr. Clark) And prior to that wasn't it the custom of the Company to call on the Police Department of the City wherever they expected crowds and they thought would need police protection?

(The Witness) We call on the City police too, but we thought we needed our own. We are held liable for any disturbance on our cars and we find it's good policy to have these.

(Mr. Toole) They couldn't arrest anybody at railroad stations?

(The Witness) Not inside the stations but they can preserve order on our cars. They have police powers, yes.

(Mr. Toole) On your property?

(The Witness) Yes. Shall I go through all of these Mr. Howard? They are all a question of service.

We will take the next one, the Traffic Department.

That's a question of trying to make our schedule. One cause of this increase, and we are very glad to do it, is the fact that we undertook some years ago to do all the checking not only for ourselves but for the Public Service Commission, and we work in connection that way with the Public Service Commission.

The Cashiers' Department, a large part of that increase is due to the fact that before this increase was made the conductors turned their money with a statement in the bag and put it in the safe. It was always making contentions; if a conductor was over or short he blamed it on the office. In order to get rid of that we found it necessary to put at all our car barns a day and night receiver who counts the money directly from the conductor so there is no question as to the correctness of the returns. That's the big item that makes that.

The Purchasing Department increases has been due entirely to the supervision of purchasing more closely, getting the bills through in order to discount bills, and also adding to his department which wasn't before the storekeeper and his organization. In 1916 they did not come under the Purchasing Department.

Q. You had them through? A. We had them under another department.

(Mr. Clark) Which department were they in before?

(The Witness) I will have to look that up and see. They may have been just per diem men. I am not sure, Mr. Clark. I can give you that later.

The Claim Department has increased because of the necessity of keeping after it closely and our claims even with the increase we have asked for the amount paid out for claims is very materially less than two cities of our corresponding size, St. Louis and Cleveland, and I think in Philadelphia and most all towns that are larger than we. The only town I know of that pays out actually less in claims is in Cincinnati, and they have a remarkable Claim Agent that does all the work and never calls on a claimant, expects him to call on him.

The Valuation Department, criticised as to the non-

necessity of it, I think is very small, it only having four to do all the work we are having them to do and is of great value and of utmost necessity of having the valuation aboslutely kept up to date. We have so many changes during the year that if we don't keep it up there will always be a question of what the valuation is.

(Mr. Clark) Isn't that attended to in formal channels?

(The Witness) It can't be unless you have some one person to look after it and make additions and subtractions and watch the whole thing, it can't be done. Every property I know of that has gone through a valuation, with the expense that we have gone to, have organized a Valuation Department to keep the valuation right up to date so day after day we know what our figures are. We have a Valuation Department that has a lot of work to do.

Q. If you didn't have that Valuation Department you would have to have other employees? A. We would simply have to add the same number of men and then it would be confused with other work and then it wouldn't work properly. Unless you have one certain man whose duty it is to look after that it won't be done. That's been found out in property after property.

(The Chairman) He looks after retirements?

(The Witness) He looks after any change in the property because of change in valuation.

Our Welfare Department has increased. We have worked extremely close with our employees on the question of welfare. We recently put on the question of group insurance and that amount is absolutely necessary.

(Mr. Clark) That Superintendent of Equipment increased from 25 to 50 employees?

(The Witness) That's due entirely in the change of the manner of cars, the complication of cars, and also a bringing over from the per diem payroll onto the monthly payroll a certain number of men. I can give those to you. There are 15 men in a bunch of that increase that have been brought over from the per diem payroll to

this monthly payroll. They simply switched one side to the other.

(Mr. Clark) You put them people in the place of the per diem men?

(The Witness) No, simply changed the method of paying.

Q. Doing the same work as before? A. Doing the same work as before but we changed the method of paying.

(Mr. Clark) What's included in the work of that department?

(The Witness) They keep up all of our cars, 1500 cars, and all of our buildings, and all electrical equipment of cars, the trucks, the car bodies, reconstruct them, paint them, it's a big organization.

(Commissioner Harper) Mr. Emmons, why does the Welfare Department show such a large percentage of increase in the payroll?

(The Witness) The Welfare Department has taken over a great deal of things that it hadn't at all in 1916. In fact in 1916, the Welfare Department had hardly been organized. It was organized largely during the war and since that time they have taken on the organization the question of nurses to employees, the question of doctors, the question of compensation, pensions to the men. The Pension Department is part of this Welfare Department, and even last year also it was added to on account of the group insurance.

(Mr. Clark) What does the Publicity Department do?

(The Witness) In the Publicity Department we have —Mr. Burroughs of the Publicity Department gets out our "Trolley Topics," the "Trolley News" and looks after everything of that nature. It's a house order department that we think is very helpful in our relation with our men.

(Mr. Clark) Do you think many people read them?

(The Witness) I don't know.

Q. What is the circulation Mr. Emmons? A. don't know the circulation.

Q. It's large isn't it? A. Yes, it is. The "Trolley Topics," the house organ, I presume will run about 10,000 copies. I imagine the "Trolley News" must run up to 50,000.

(Mr. Toole) How about "Rush Hour Rollo."

(The Witness) Not included in that. He is included in the——

(Mr. Tingley) Service?

(The Witness) Service Department. Didn't you like his poetry?

(Mr. Toole) I certainly don't.

(The Witness) You haven't heard of him for some time.

(Mr. Clark) I see you increased the employees in the Publicity Department from 2 to 5. It takes five people to do this publicity work?

(The Witness) Now, listen, that Publicity Department has a lot more than you think it does. It handles all the publicity for the special car work, the special bus work, the outings and tours. It does lecture work in the different places to let people know about our service and things of that kind, so from 1916 to 1927 we have only increased that 3 employees and we think we have not increased it very much.

(Mr. Clark) Is it customary for street railway companies to have a department of that kind?

(The Witness) It's not only customary for them to have a department of that kind but you will find a great many more in it because they do their own printing in a department of that kind and do a great deal more work than we do.

(The Chairman) You have only, Mr. Emmons, increased your platform men about 300 since 1916?

(The Witness) Yes, that's been due to the larger cars,

the articulated cars, the one man cars, trailer cars, multiple unit cars, all of which are doing now with one man what two men used to do before. In fact a two man car today, double truck, is doing about twice the work that a single truck car did before with two men.

(Mr. Clark) Well, that would show a decrease in platform men?

(The Witness) In platform men?

(Mr. Clark) This is an increase?

(The Witness) Since 1916, we have had more than an increase of 11% in revenue in that time and an increase in car miles of 9.6.

(Mr. Clark) The revenue is due to the increased fares?

(The Witness) To some extent, yes.

(Mr. Clark) You would look to the revenue passengers, not the car miles to denote the demand for the position of platform service?

(The Witness) All I can say is that the number we have now are required for the service we are giving.

(The Chairman) The difference in pay from $2,100,000 to $4,467,000 is just the increased pay of the men?

(The Witness) Yes. They have been raised from 26 cents up to 52 cents.

Q. And you have to have platform men to handle the people in the rush hours don't you?

(The Witness) Yes, that makes a great deal of trouble.

Q. Is that in any wise different from 1916? A. The peak of our rush hour is getting worse all the time.

Q. Now at the end of that exhibit of Mr. Clark's he shows a per cent. increase in all your departments?

(Mr. Clark) Maintenance of Way. How is it you have made absolutely no increase there in the number of employees?

(The Witness) The Maintenance of Way was really

an organized department in 1916. It was a real organized department at that time and it was given special attention at that time by Mr. Mifflin Hood.

(Commissioner Harper) There you have one less employee and the payroll is $707,000, where it was $283,000 before?

(The Witness) That's an increase in rate. The rates have all increased very materially, Senator. The wages have all increased. It is three times what they were before in the Maintenance of Way Department.

Q. Is that largely unskilled labor? A. Yes, it is.

(Mr. Toole) They are not high enough yet, Mr. Emmons?

(The Witness) We need more money for it.

(Mr. Clark) You say they had a thoroughly organized Maintenance of Way Department. In your first increased rate case, which was the 6 cent case, weren't you criticized for deferring maintenance?

(The Witness) That was a question of expenditure of money on rails and ties and things of that kind.

(Mr. Clark) That was a question of labor too wasn't it?

(The Witness) That was later than 1916.

(Mr. Clark) I know, but it covered the period of 1916?

(The Witness) No, it didn't. It covered 1917, '18 and '19, when the United States itself got into the war.

(Mr. Clark) Didn't you start to defer maintenance in 1916?

(The Witness) I wasn't here. I don't think they did. There wasn't so much deferred maintenance.

(Mr. Clark) About fifty some miles of track?

(The Witness) That's what they counted should be done, but some of that track isn't done today yet. It's track that can be kept going.

Q. Now, taking the totals of the exhibit, or the exhibit as a whole, does it show any unreasonable growth in expense, or what does it show? A. It shows, if you put those two together, it shows an increase of fifteen per cent. I was going to check that up, but in the increase in car miles and revenue passengers I think you will find it will run about the same way, Mr. Howard.

(Mr. Clark) I assumed that. That's the reason I didn't go to the trouble of including revenue passengers in there.

(The Witness) That's all the proof that is necessary. There was a question of criticism at one time of 1926, and I had a statement prepared. At that time revenue passengers increased 26.3%. Mr. Waters just shows me there is a difference of 12.44 in car miles during this period, but in 1917-'26, with an increase in passengers of 26.3%, we increased our seat miles 21%, we increased our track mileage only two per cent., we increased our car miles 12.2 per cent., we increased the transfers received 6.4, we increased our seat miles per revenue passengers 6.1, and we increased our percentage of double truck cars 56 per cent. We got that up simply to answer the statement that was made that our service today was worse than it was, I think some person said in 1913, but I can hardly see how it can be when we have 56 per cent. more double truck cars than we had then, we are giving 6.1 per cent. more seat miles per revenue passenger, we are giving 37 per cent. more transfers, we are giving 31 per cent. more seat miles, we are giving ten per cent. more car miles, so that it seems to me these comparisons are getting so far back they are rather not helpful.

(Examination suspended.)

NOTE: At 4.00 o'clock P. M. the Commission then adjourned until Wednesday, November 30th, 1927, at 10.00 o'clock A. M.

SIXTEENTH DAY.

(Mr. Howard) We have two witnesses who have engagements late and we would like to suspend Mr. Emmons' examination to hear them. They are both short.

Thereupon—

JAMES C. FENHAGAN,

a witness of lawful age, produced on behalf of the applicant, in rebuttal, having first been duly sworn according to law, was examined and testified as follows:

DIRECT EXAMINATION.

By Mr. Markell:

Q. Mr. Fenhagan, what is your business and how long have you been engaged in it? A. I am a member of the firm of Robert Garrett & Sons, Investment Bankers and have been such since 1911.

Q. Now, will you tell the Commission in a general way the nature of your firm's business? A. The buying and reselling of investment securities, including public utilities, railroads, municipals and industrials.

Q. You mentioned public utilities. Can you say any more about that scope of your business in public utilities or does it include all branches of public utilities? A. Oh, yes. Power, light, railways, both urban and interurban.

Q. Before the war I imagine it included a good deal more street railways than it does now, didn't it? A. Yes.

Q. Are you familiar with the returns that investors expect on various classes of securities and on various properties in which they invest their money for securities and stocks? A. Well, we have to be in the merchandising of securities. If we make a mistake we made a bad purchase.

Q. And you have to make a study in that business.

What in your opinion would be the lowest rate of return that such a company as the United Railways & Electric Company should be permitted to earn on the value of their property in order to make that return equal to that generally being made at the same time and in the same general part of the country on investments in other business undertakings which are attended by corresponding risks and uncertainties?

(Mr. Clark) That's a matter of law.

(Mr. Tingley) I will be very glad to have that answered?

(Mr. Clark) The Supreme Court thinks that's a matter of fact.

(The Chairman) Answer it Mr. Fenhagan?

(The Witness) In my opinion its certainly not less than 8%.

Q. Will you tell the Commission in your own way what you consider to be the outstanding elements of risk and the advantages and disadvantages in a utility business that lead you to the conclusion that at least 8% would be necessary to attract capital to such a business?

(Mr. Clark) Now, you say utility business. Are you speaking of the street railway industry or generally?

(Mr. Markell) I spoke generaly but I will specify the street railway industry before I get very far Mr. Clark.

(The Witness) Will you repeat the question?

Q. Now, will you tell the Commission in your own way, what you consider to be the outstanding elements of risk and the advantages and disadvantages in the utility business generally and in the street railway business particularly that leads you to the conclusion that at least 8% would be necessary to attract capital to such a business? A. The outstanding advantage I should say that a street railway usually has, was up until the time of the war, a practical monopoly. The advent of the automobile has very much changed that. The disadvantages are of course an income that is limited on the maximum side

but not on the minimum. I don't understand the scope of the question exactly Mr. Markell.

Q. You have just mentitoned the fact that the return is limited on the maximum side and not on the minimum side. Explain to the Commission the practical bearing on that in the street railway business particular? A. Well, since the establishment of Commissions of course the street railways unlike many other industries, are limited in the amount they can charge, irrespective of the fact that the purchasing power of the money they receive may be and is much less than it was.

Q. Looking at the recent history of street railway companies, tell the Commission what you have to say as to the financial risk involved in the street railway business as compared with the same business before the war? A. Well, the financial history of the street railways of the country before the war shows far less prosperity than it did before that time.

Q. Before the war what class of utility securities would you say ranked highest with investors? A. Well, the Power Securities, have always, certainly for the last fifteen or twenty years, been the favorite. You would have to go back sometime to find a change in that condition.

Q. You can go back to the point when the Street Railways securities were regarded much higher than the power securities? A. Yes, but it's a long way back.

(Mr. Clark) When? In your life time?

(The Witness) Oh, yes, in my life time. Certainly.

Q. Now, Mr. Fenhagan, will you just give the Commission in your own way the reasons for the opinion that you have expressed that at least an 8% woud be a necessary return to attract capital in such a business as the street railway business? A. Well, a street railway, to be properly financed, I would say would have to be financed not more than 60%, and preferably 50, though none of them get to that nowadays, on bonds, the balance on stocks, either preferred or common.

(Mr. Clark) I beg your pardon, did you limit that to street railways?

(The Witness) I was asked the question in regard to street railways, Mr. Clark, I think.

(The Chairman) 60 on bonds and 40 on junior securities?

(The Witness) Yes, sir.

(Mr. Clark) And your answer was in response to his question regarding street railways?

(The Witness) Yes, sir. Very difficult under any conditions to float a street railway security now because the record of the earnings, either of individual companies or of the industries, as a whole, have not showed sufficient margin of profits to make an investor feel safe in his holding of that class of security. Therefore, I would say that most of the common stock, have gotten into a very speculative situation.

Putting it in another way, the lack of earnings of the railroad, has made it more expensive for them to finance because of that history.

Q. So that that's true of the industry generally? A. Undoubtedly.

Q. Not merely of any particular company? A. Undoubtedly.

Q. Mr. Fenhagan, I hand you an exhibit which has not yet been offered in evidence, but which will be offered in evidence today, which is entitled, "Statement showing the cost of financing by the United Railways & Electric Company and its subsidiaries, covering the period from 1920 to 1927."

I will ask you to look at that exhibit and make any comment that you have to make as to how that experience of the United compares with what you have just said about street railways. Whether that's out of line or in line with the general situation? A. No, I should say it's quite in line with the general situation. The general impression I get from this tabulation is that it's costing the United Railways or did cost them more in 1927 to finance than it did back here on the same class of securities in 1922.

Q. That isn't out of line with the situation of street railways? A. No.

Q. Of course it isn't true of many other businesses? A. No, it isn't true generally.

(Mr. Clark) You say it cost more in 1927 than in 1922?

(The Witness) I saw those two dates because they are a similar class of security.

(Mr. Clark) They are the two dates you used?

(The Witness) Yes.

(Mr. Markell) If the Commission please, an ordinary exhibit would be offered through Mr. Emmons, but I think it is convenient to offer it in evidence now and we will offer it in evidence to be marked Exhibit No. 31.

NOTE: Statement above referred to is here filed in evidence and marked Applicant's Exhibit No. 31, rebuttal.

(Mr. Markell) The witness is with you gentlemen.

CROSS-EXAMINATION.

By Mr. Tingley:

Q. Mr. Fenhagan, when you speak of the risk which is encountered by public utilities and particularly street railway companies, in their limited earnings, isn't it also true that they are protected by Commission regulation from petition? A. Mr. Tingley I would say that we all thought they were, but of course as I said just a while ago, the advent of the automobile has changed that a great deal.

Q. You mean the private automobile? A. The private automobile, yes.

Q. Not competing bus lines? A. I wasn't thinking of that as much as of the private automobile.

Q. They are protected from competing railways and bus lines? A. Yes.

Q. Mr. Fenhagan, are any street railway properties

being built at the present time to any extent? A. To any extent, no. I tried to think of any. I don't know of any at the moment. There may be some Mr. Tingley.

Q. Any extensive security issues being floated at the present time by street railway companies? A. No.

Q. How would you account for that fact? A. No.

Q. How would you account for that fact? A. Well, the history as I said just now, I think the history of the industry, and the risk of the industry in the minds of the investor.

Q. How do you account for that situation obtaining throughout the country as distinguishable from the situation of other public utitlities? A. Well, I think this. It has always seemed to me that it was more difficult to get away from the five cent unit in spite of the fact that the five cent piece, the five cent unit is not worth nearly so much today as it was, than in corresponding cases in other public utilities where they may have charged, a Power Company may have charged a certain amount per KWH which hadn't the same fixed unit value in the minds of the public. It was easier to change.

Q. Why do you think it's hard to get away from the five cent unit? A. I suppose it's a little matter of psychology, isn't it.

Q. Isn't it because the five cent unit was the value of the service in 1913, before the war and generally accepted by the industry and the public generally? A. Probably it was the value of service at that time.

Q. Do you think that value of service exercised any effect upon the rate of return earned by the street railway companies?

(Mr. Clark) I think Mr. Tingley is using an expression familiar to us, but——

(Mr. Tingley) It's familiar to Mr. Hoyt.

(The Witness) Perhaps I don't understand it Mr. Tingley.

Q. Let's put it this way. You don't know whether there is a legal principle of service value which affects street railway returns or not, do you? A. I am afraid I still don't quite understand the theory of that question.

Q. I mean this. Does the worth of the service to a customer exercise a larger affect in determining the return of street railway companies, than it does those of other public utilities? A. I don't see why it should.

Q. You don't know that it doesn't do you? You wouldn't say whether it does or not? A. It seems to me they are very comparable.

Q. Have you heard the testimony of Mr. Hoyt in the Gas Company case of 1915, which was made a part of this record? A. I am familiar with it.

Q. Do you recall that Mr. Hoyt thought that value of service should exercise an effect on the return of the United Railways & Electric Company.

(Mr. Markell) He didn't say so.

(Mr. Tingley) That's a matter of record Mr. Markell.

(The Witness) I have not enough familiarity with that testimony Mr. Tingley.

Q. If Mr. Hoyt did say that would you disagree with him, Mr. Fenhagan?

(Mr. Howard) I don't think you have explained to Mr. Fenhagan what you mean by value of service to the customer.

(Mr. Tingley) I don't think he understands it Mr. Howard.

(Mr. Howard) I don't think it's fair to pursue a question to the witness when he doesn't understand it.

(Mr. Tingley) I won't pursue it any further because I think it's clear in the record.

Q. (By Mr. Tingley) How many street railway companies in the country, do you know of that are earning 8% at the present time on their valuation? A. I haven't

made a sufficient check close enough to know. I don't think a great many of them are.

Q. Do you know any of them that are? A. Off hand I haven't any in mind.

Q. Do you know any that are earning 7% of their valuation? A. I should say there are very few if any.

Q. How many do you know of that are earning 6? A. Now, you are pinning me down to tables and I will have to entirely check up.

Q. Assuming that it's true that probably very few street railways companies are earning as much as 6% on their valuation, how would you account for a situation of that sort? A. I would think the fact that there are so few earning eight or seven per cent. on their value is the fact that makes street railway securities so unpopular today and puts them in a different investment class.

Q. Now, you say unpopular today. What was the general rate of earnings of street railway industry before the war? A. Are you pinning me down to actual figures? I can't give them to you. Much greater than it is today in a general way.

Q. What would you say it was in percentage? A. I prefer not to make any estimate without checking up.

Q. How radically would you say the situation had changed as to rate of return since 1911? A. One fair measure would probably be the different measure of the purchasing power of money.

Q. Yes, we think that it is. Mr. Fenhagan, if it is true that during that entire period the street railway industry has been earning a materially lower rate of return than was earned by all other utilities, would you think that was due to the management, of indifference to their stockholders or some other reason for it? A. A very decided economic reason.

Q. You would think there was some underlying economic reason for it? A. I would.

Q. Now, in the opinion which you have given on Ex-

hibit No. 31, that's of course based on the assumption that the figures shown in the exhibit are correct? A. Yes.

(Mr. Tingley) That's all.

CROSS-EXAMINATION.

(Continued.)

By Mr. Clark:

Q. Mr. Fenhagan you have spoken generally of the street railway industry. I want to ask you two or three questions concerning the United of Baltimore. What did you say concerning the 60% net ratio? A. Well, I said that a fair ratio for raising capital for a street railway would probably be 60% in bonds.

Q. 60%? A. Yes.

Q. In bonds, I presume you mean debts? A. Fixed obligations of the company.

Q. To what extent do you bankers, in analyzing a property, give consideration to values other than the physical value? A. We give a great deal of consideration to the earning power.

Q. But with respect to the value of the property, you don't give much consideration to what we know as intangibles? You look to the physical value, don't you? A. Yes, to an extent. Our judgment of the physical value has very little effect as to your security, comparatively little effect on your security if the company is earning no money. In other words if the bond holders have to cease the property.

Q. But answering my question you give very little weight to non-physical or intangible values when you come to look at the value of the property that you are analyzing. You look at the value of the physical property? A. We do look at the physical property, yes.

Q. Do you know what the ratio of the Commission's value given to the physical property of the United is to its debts? A. Off hand I don't. I saw the figures.

Q. You don't know then that the debt of this property is about eight million now in excess of its physical value?

(Mr. Markell) What does physical value mean? That hasn't any meaning?

(Mr. Clark) Nobody knows what physical value means.

(Mr. Markell) No, you use your own way peculiar to you.

(Mr. Clark) That is the value outside of going concern and franchises. The value of the property.

(The Witness) No, wait a minute, Mr. Clark?

(The Chairman) You also include in that going concern value, overheads and all that sort of thing. I suppose, Mr. Clark, such things as the Commission allowed beyond the bare bones of the property, the rails and cars and power house and wires.

(Mr. Tingley) You mean physical property, don't you, Mr. Clark?

(Mr. Clark) I mean the physical property in place and in operation.

(Mr. Howard) You can't have physical property in place and in operation without having these other elements in it.

(Mr. Clark) I think Mr. Fenhagan understands me when I say the physical property of the United Railways?

(The Witness) You mean a scrap value or a going value or what?

Q. No, we haven't given scrap value in the physical property of the United. We have valued the property of the United in pace and in operation.

(Mr. Markell) Who do you mean by we?

(Mr. Clark) I mean the public agency of Maryland. The Public Service Commission of Maryland.

(Mr. Howard) You mean the value of the property exclusive of going value and easements?

(Mr. Clark) Yes, sir, I have so stated.

(The Witness) Mr. Clark, I would think any banker, in buying bonds of the United or any other property, would lay a great deal of stress on the valuation placed there by the Public Government Agency, whatever that might have been, but that would include something more than the bare rail and track, etc.

Q. Of course you take a good many things into consideration, you take the physical value, you take the entire value, you take the value as shown by the books of the company as well as regulated by the Commission and the market capacity and output and a number of things in analyzing its security? A. Quite so.

Q. But my particular question was limited to the question of how much consideration you gave in analyzing a property, how much consideration you gave to values other than physical values? A. We would have to give consideration to all factors. Its very difficult to differentiate between the amount of value you put on one piece of rail and the amount of value you put on your franchise and other things.

Q. Mr. Fenhagan, excluding easements, are you familiar with the fact that the Public Service Commission has placed a valuation on the United Railways property of $70,000,000.00? A. About that, yes.

Q. And you are familiar with the fact that in that $70,000,000.00 is included about eight and a half million dollars assignable to going value? You are familiar with that? A. Yes.

Q. Now, are you familiar with the fact that the debt of the United Railways the fixed debt of the United Railways is about $70,000,000.00 today? A. You are speaking of the entire debits, the income bonds and everything else?

Q. Yes? A. About that, yes. I haven't the exact figures. I assume you have the figures there.

Q. I am speaking of round figures. They are about the same. To what extent if any does that affect the credit of the United Railways among the bankers? A.

Mr. Clark, there are a number of elements entering into the judgment of a banker on a property. That would have some effect.

Q. It would have a great deal effect, wouldn't it? A. Yes.

Q. If the debt of the company equals the valuation given by the regulating body of the State?

(Mr. Howard) Is that a fair question?

(Mr. Clark) I think so.

(Mr. Howard) The debt of the company equals the valuation given? Valuation of what?

(Mr. Tingley) Valuation without easements.

(Mr. Clark) I am speaking now of the $70,000,000.00.

NOTE: Question here re-read by stenographer as folows:

"Q. If the debt of the company equals the valuation given by the regulating body of the State?"

(The Chairman) Do you mean Mr. Clark, the value given, less easements and going value?

(Mr. Clark) No, I am speaking of the $70,000,000.00. That's less easements.

(Mr. Markell) But you didn't say that?

(Mr. Clark) The valuation as it stands at the present time, because the question of easements is still open.

NOTE: Questions and answers here re-read by reporter as follows:

"Q. Now, are you familiar with the fact that the debt of the United Railways the fixed debt of the United Railways is about $70,000,000.00 today? A. You are speaking of the entire debts, the income bonds and every thing else?

Q. Yes? A. About that, yes. I haven't the exact figures. I assume you have the figures there.

Q. I am speaking of round figures. They are about

the same. To what extent if any does that affect the credit of the United Railways among the bankers? A. Mr. Clark, there are a number of elements entering into the judgment of a banker on a property. That would have some effect.

Q. It would have a great deal effect, wouldn't it? A. Yes.

Q. If the debt of the company equals the valuation given by the regulating body of the State.

(Mr. Howard) Is that a fair question?

(Mr. Clark) I think so.

(Mr. Howard) The debt of the company equals the valuation given? Valuation of what?

(Mr. Tingley) Valuation without easements.

(Mr. Clark) I am speaking now of the $70,000,000.00."

NOTE: Question here re-read by stenographer as follows:

"Q. If the debt of the company equals the valuation given by the regulating body of the State."

(Mr. Markell) That isn't a fact. It's a valuation less easements.

Q. Valuation less easements? A. My answer there would be that again a banker would take very largely into consideration the valuation of those easements and the power of the company to earn money on its securities.

(Mr. Tingley) You wouldn't take into consideration the value of the easements if it hadn't been fixed would you Mr. Fenhagan?

(The Witness) Probably not.

(Mr. Tingley) Taking that exhibit, Mr. Fenhagan, of the company, which was shown you, Exhibit No. 31, the fourth from the last column on the right hand side, is cost of money to the company?

(The Witness) Yes.

(Mr. Tingley) That shows doesn't it, that in July, 1920, the cost of an issue to the company was 9⅜%?

(The Witness) Yes.

(Mr. Tingley) And a figure for an issue in 1921 was 8.70%?

(The Witness) Yes.

(Mr. Tingley) And for 1922 6.75%?

(The Witness) Yes.

(Mr. Tingley) For another issue in 1922, 6.60%?

(The Witness) Yes.

(Mr. Tingley) For an issue in 1922, the same year, 7.27%?

(The Witness) Yes.

(Mr. Tingley) For another issue in 1924, 6.93%?

(The Witness) Yes.

(Mr. Tingley) For an issue in 1927, 7.32%?

(The Witness) Yes.

(Mr. Tingley) Now, the next column to the right, "Marked Yield," doesn't that show a decline from 8% in 1920 to 6.28% in 1927?

(The Witness) Yes, Mr. Tingley. The answer to that is partly involved in the situation that we are in a rather desperate financial condition in this country in 1920. Money exceedingly tight.

(Mr. Tingley) Yes. That would indicate wouldn't it that yields of securities generally are lower at the present time than they were in the immediate post-war period when this financial stringency was felt?

(The Witness) With the risk equal, yes. It was not true as to street railway properties.

(Mr. Tingley) If the exhibits in the case show that the company at the present time, that money is costing

it less than in 1920, you wouldn't give the same answer would you?

(The Witness) Would you repeat that question?

NOTE: Question here re-read by reporter:

(The Witness) My answer to that would be, that if the credit of the company was equally as good today as in 1922, or whatever date you took, it should cost less to finance. Securities should be selling at a higher figure and lower yield.

(Mr. Markell) Mr. Tingley has called your attention to two facts, one that street railways generally are not now earning a fair return, and the other that street railway companies are doing practically no large financing, at least there is no construction being done. Will you tell the Commission what relation the second of those facts have to the first if any in your opinion?

(The Witness) A very decided relation, because it's almost impossible to finance a new street railway today as far as any public financing goes.

(Mr. Markell) Does the experience of the street railways in that respect have any bearing on your opinion as to the inability to attract capital by such returns as the street railways have been getting in the last few years?

(The Witness) Why certainly.

CROSS-EXAMINATION.

(Continued.)

By Mr. Toole:

Q. Mr. Fenhagan you were speaking of the risks of street railways. What risks do you mean? A. Risk of default from an investor's standpoint, Mr. Toole.

Q. Will you make that a little clearer? I am not such a financier as these other gentlemen? A. When an investor buys a bond he wants to be sure that he is going to get his interest to make him safe and his principal at maturity.

Q. But after they have bought the bonds already, what risks do they run? Haven't they got them? A. Well, sir, it's always possible to sell a bond if it's a good bond. If it isn't a good bond they can't sell it. That's the answer.

Q. But after the railways have sold $70,000,000.00 of bonds, who runs the risk then? You are talking about the risk of the bond holders and not the railways company?

(Mr. Howard) Mr. Toole means that such risk as there is is of the present security holders. Passes the buck to the security holders.

Q. Now, don't you think they were on notice when they bought those bonds? A. On notice of what?

Q. Of the condition of these bonds, the nature of the property? A. Well, I would say that some of those bonds were put out a good many years ago. The man who could have foretold at that time what was going to be the trend of events in the street railway industry would have been far wiser than any one I know.

Q. Now, because these investors made a bad guess, do you think now that the people of Baltimore should be mulcted to make up, to give them what they think they ought to have got about twenty years ago? A. The word mulcted would certainly lead me to answer no, but I wouldn't say a man was being mulcted because he were being asked to pay more today for a street railway service as he is being asked to pay more in almost every other line of activity.

Q. That wasn't quite the answer that I wanted. Let's put it another way? Suppose the value of these bonds would have gone up? A. Yes, sir.

Q. And instead of being as you say a risk, they would have been gilt edge, so to speak, would you have thought it proper then for the bond holders to have paid back to the people of Baltimore the surplus over and above what they paid for them? A. No, Mr. Toole, certainly not.

Q. Then why should the people of Baltimore pay when the value has fallen down?

(Mr. Tingley) It's a one-way gamble, Mr. Toole.

A. Because Mr. Toole, a bond holder is a creditor. He is limited as to the amount of income which he can get out of that security and he is entitled to just that income. If I have or you have someone's promise to pay you expect that amount.

Q. I know, but if those bonds are worth more, he could sell them and get a bigger price and invest it and get a bigger price in the proceeds, couldn't he? A. Quite so. That's a condition of the market trend.

(Mr. Howard) You mean suppose the bond becomes worth double its par value, don't you?

Q. Don't you think, Mr. Fenhagan, that investors should take the natural result of their acts? A. Just what do you mean by the natural results of their acts?

Q. When a man goes into the market and buys, if he makes a profit he wants it, don't he? A. When a man is buying bonds he is trying to put his money out on interest.

Q. And if those bonds go up he wants that increased value? A. That's a secondary consideration. The first consideration is the safety of his principal and interest.

(Mr. Howard) Can he ever get more than his principal and interest?

(The Witness) At maturity, no.

Q. Of course, but if the value goes up he is in position, while he can't get any more interest on his bonds, he can sell the bonds and get more interest on what he re-invests, can't he? A. Just the same as if he buys sugar today at 2c a pound and it goes up to 3c because of economic conditions he has made a profit.

Q. What I am trying to get at is by what code of morality, do you justify calling on the people of Baltimore to pay for the bad judgment of investors? A. Mr. Toole

when you get down to a discussion of the realms of morality, it might take a long while.

Q. You mean that business and morality don't go together, is that the idea? A. No, but I don't think the question of morality was up. We are dealing with an economic rather than a moral question.

Q. If you can get it, get it?

(The Chairman) I think that this is entirely irrelevant.

(Mr. Toole) Mr. Chairman, that may be, but that's the way the people on the street are talking. The people that's got to pay this difference if any.

(The Chairman) The question before the Commission is whether the United Railways is entitled to an increase in the rate of fare, whether they are entitled to it as a matter of right. Now, the feeling about the matter, disinclination to pay an increased fare and things of that sort, have no bearing on the case whatever. Of course, nobody wants to pay an increased fare. Nobody wants to pay any more for anything than they have to pay for it. The question is a matter of right and wrong, absolutely the right of the company to have it. If the company is entitled to it as a matter of right and as a matter of law, they will get it, and if they are not entitled to it as a matter of right and as a matter of law they will not get it, and this question of morals and whether the investor who buys a bond that goes up has any rights in the matter or whether he buys a bond that goes down has nothing to do with this case at all as I see it.

(Mr. Clark) You have spoken several times of earning power as an important factor in analyzing the securities of a company. Just how do you determine that? Where do you look in the operations of the company to determine that.

(The Witness) In their published statement.

(Mr. Clark) You look in their published statements, at what point?

(The Witness) At the earnings, net income of the com-

pany applicable to the payment of the interest on its securities whatever they may be.

(Mr. Clark) That's the gross income. Then you look at the ratio of profit to total earnings.

(The Witness) Fixed charges. Profit to total earnings.

(Mr. Clark) Gross income to total revenue?

(The Witness) To fixed charges. Not to revenue.

(Mr. Clark) Well, put it another way. The difference between the operating ratio and the total revenue.

(Mr. Howard) You mean you looked to see what the net profits are?

(Mr. Clark) No, I don't mean that, I mean the gross. For example this company earned out of every dollar it collects 26.28 cents. Now, that is the gross revenue from the dollar collected. That's the ratio.

Do you know from your experience in analyzing securities whether that is a fair and reasonable profit in the street railway industry.

(The Witness) That was not the ratio to which I was referring, Mr. Clark, at all.

(Mr. Clark) No, but I am referring to it. If 26.28 cents out of every dollar collected is profit——

(Mr. Howard) Now, is it profit?

(Mr. Clark) Yes, sir, gross profit.

(The Witness) When you say gross profit, before paying interest on their debts.

(Mr. Clark) Just before paying interest.

(The Witness) Isn't the interest on the debt just as much something to be paid as the payroll.

(Mr. Clark) Absolutely.

(The Witness) Yes?

(Mr. Clark) Is that where you look then in order to de-

termine the earnings? The net earnings or the gross?

(The Witness) The ratio of which I spoke was the gross income in its reference to fixed charges of the company.

(Mr. Clark) As a matter of fact, with respect to the United in Baltimore, isn't it the earning power of the United in a city like Baltimore that gives it the credit it has?

(The Witness) Its earning power, very largely, or lack of earning power the reverse.

(Examination concluded.)

Thereupon—

DR. JACOB H. HOLLANDER,

a witness of lawful age, produced on behalf of the Applicant, in Rebuttal, having first been duly sworn, according to law, was examined and testified as follows:

DIRECT EXAMINATION.

By Mr. Markell:

Q. Dr. Hollander, you are the Professor of Economics at Johns Hopkins University? A. I am.

Q. I suppose it's hardly necessary in Baltimore to ask Dr. Hollander to explain his qualifications?

(Mr. Tingley) Certainly isn't so far as I am concerned.

(The Chairman) Dr. Hollander's qualifications are admitted.

Q. Dr. Hollander, the contention has been made, you have already heard it suggested this morning, during Mr. Fenhagan's testimony, that before the war five cents was a reasonable sum to pay for a car ride, but that to pay ten cents now would be to require a man to pay more than a car ride is worth to the customer.

I want, without going into details, in the matter, to

ask you to explain to the Commission, in your own way, having reference to the value of money before the war, and the value of money now and the standard of living and the level of wages, and the capacity to pay, whether or not, assuming a car ride to be physically the same thing now, as it was in the old days, 30 years ago, or 15 years ago, a customer would get as much for a ten cent piece now, as he got for a five cent piece before the war, looking at it subjectively as you might say, in the worth of the service to the customer? A. If I understand your question, sir, it is that we assume that a five cent fare in 1913 gave the customer a fair return in value, and if that be so, assuming no change in the quality of the service, does a ten cent fare now. That leaves the question turn upon the relative burden of five cents for the same service in 1913 and the ten cents in 1927?

Q. That's the point I would like you to explain? A. I merely repeat that so I might be sure I have in mind the same thing that you have.

That would depend upon the income of the consumer. Now, the income of the consumer, and in particular of the wage earner, has increased from 100 to approximately between 200, let us say, and 235, so if that is the typical consumer, a withdrawal of five cents from an income represented by 100 would be more of a deprivation than a withdrawal of ten cents from an income represented by let us say, taking the lower estimate of 220. That rests upon the facts as to wages which would be probably the typical income of the customers of the street railway.

Q. Will you tell the Commission what data are obtainable from which you express that opinion as to wages? The figure 220 and 235? A. Yes. The statistics of wages in the United States have never been compiled in the way that the prices of commodities have. We are dependent for any exact knowledge upon first the collection of facts as to rates of wages in Union industries in a series of cities among which is Baltimore.

In the second place upon the earnings of workers in representative establishments of New York State, collected by the New York Bureau of Labor statistics.

Third by computations made by certain accredited authorities, such as the staff of the Federal Reserve Bank of New York, and the National Industrial Conference Board, a very influential body of manufacturers in the United States who are not biased or influenced.

Now, if we take those up in order for example, here is the computation as to the rates of wages per hour for 835,000 members of organized trades located in 66 of the principal cities of the United States as of May 15th, 1927.

That shows that the rate of wages per hour in 1913 was 100 and in 1927 down to date was 259 and a half. In 1926, 250.

Now, if we turn to Baltimore, which is one of those cities, the figures are in 1913, the particular industries would be something like this; brick layers, 62½c in Baltimore in 1913, $1.62c in 1927. I am taking that in the order in which they come. Where Baltimore is not for some reason included, I have taken Cincinnati.

Building labor 20c in 1913, 60c in 1927. Carpenters, Baltimore, 43.8c in 1913, $1.10 in 1927. Cement finishers, 50c in 1916, which was the first available figure, $1.25 in 1927, and so on running thru the entire list of industries.

(The Chairman) Have you common labor there?

(The Witness) The nearest I had to it, without any reflection upon how common it is, would be hod-carriers. Would that service your purpose? But that's a skilled trade I suppose.

(The Chairman) Well organized.

(The Witness) These are all organized industries. Now, those are all the collections made by the United States Bureau of Labor Statistics and they serve to bear out the estimate of at least 225.

Now, in regard to the average weekly earnings in representative New York State factories includes all employees in both office and shop. We have there, based

on 1914, as 100 an increase from $12.48 in 1914 to $29.02 in 1926, and $29.57 for September, 1927.

That has the advantage over the preceding figure of giving not merely rates per hour, but actual earings per week.

From that we turn them to the collections made, not under direct Governmental authorities but by such agencies as the Federal Reserve Board, and that shows a result that corresponds very closely thereto. The index of wage increases, which is here collected by Mr. Carl Snyder, the Chief Statistician of the New York Federal Reserve Bank, is a wage index, that is to say all kinds of wage receiving classes are included and given an importance relative to their numerical proportions.

Q. Would that include common labor? A. Yes, these are the weights given. Agricultural wages five, railroad ten, professional five, factory forty, building fifteen, clerical fifteen, unskilled ten. It's a very comprehensive figure of the wage receiving class, and that would show for the last period, which would be the middle of 1926, since which there has been no revision, a figure practically 200, and the unskilled labor is differentiated here, and runs substantially above 220. Probably near 230.

Q. The base is 1913? A. 1913, 100. I have the exact figures here. The last figure for the entire group is December, 1926, 222.

(The Chairman) Before you leave that will you take agricultural labor?

(The Witness) Yes, average prevailing farm wage rate, per month, without board, 1913, is equal to 100 and was $30.21. Now, the last figure available is $50.10 for October, 1926.

(Mr. Toole) Have you the same figures for unskilled labor, Doctor?

(The Witness) Now, for unskilled labor, average weekly earning rate for unskilled labor in second Federal Reserve District, the last figure which I have here is for January, 1927, 220 $24.02.

(Mr. Toole) Now?

(The Witness) No, I haven't anything later than January, but I think it's been admitted there has been no weakening in that wage trend.

(Mr. Sobeloff) What is that compared with?

(The Witness) With 100 for 1913.

(Mr. Toole) Where is the Second Federal Reserve District?

(The Witness) New York.

(Mr. Toole) New York City?

(The Witness) New York State as a whole.

(The Chairman) Have you got a corresponding figure for unskilled labor in Baltimore?

(The Witness) No, we only have the Bureau of Labor Returns, which are of union rates, but, sir, I think it is a safe statement to make that unskilled labor has kept up with the general trend of skilled labor, except in a few highly favorably placed building trades such as the plasterers for example, but that the ordinary grades of unskilled labor, have been consequent probably upon the restriction upon immigration in a more favorable position than most of the skilled trades.

(The Chairman) The figures you have given are, do you say, from the Second Federal Reserve District.

(The Witness) Yes.

(The Chairman) Which takes in the whole of New York State.

(The Witness) New York State. It simply happens that the second reserve district has had the staff to make this computation.

(Commissoner Purcell) Doctor, you gave a figure of 220 resulting from giving certain weights to various classes?

(The Witness) Yes.

(Commissioner Purcell) Have you the figure corresponding to that, applying particularly to Baltimore City?

(The Witness) The weighting, sir, was in connection with the New York district, the Federal Reserve Figures.

(Commisisoner Purcell) You have no corresponding figures for Baltimore?

(The Witness) No, and represented a weighting corresponding to the relative number of different classes of labor.

(Mr. Toole) Isn't it true, Doctor, that wages are generally higher in New York State than in Baltimore City and Maryland?

(The Witness) Yes, sir, but I suspect that was the case in 1913 as well.

Q. Have you any reason to think that the change from 1913 to date would be any less in Baltimore than in any of the other figures that you have given? A. No, for the reason that the increase in the cost of living in Baltimore is very much on a plane with the increase in the cost of living in other cities, and you would say, therefore, you would be prepared to expect a movement in wages corresponding.

Q. Now just at that point, Doctor Hollander, there has been offered in evidence in this case certain figures, or have been offered in evidence in this case, certain figures as to the Bureau of Labor, General Commodities price index, and one of the exhibits offered characterized that as cost of living. Will you tell the Commission whether that price index is the cost of living index, or what's the difference betwen the two terms?

(Mr. Howard) The exhibits referred to are People's Counsel Exhibits No. 22 and 23. A. My statement would be clearer if I might have the chart which I have prepared.

NOTE: The Commission then adjourned for a short recess.

AFTER SHORT RECESS

NOTE: Previous question here read by Reporter.

A. The most authentic and most commonly used indices of prices and of cost of living are those collected and tabulated by the United States Bureau of Labor, and there are three of these, the one of Wholesale Commodities, the second of Retail Food and the third of Cost of Living.

The wholesale commodities and the retail food are collected monthly, the cost of living quarterly up to within the last year or so, since which time it has been published only semi-annualy.

This chart shows the three. The black line as marked is the wholesale commodities, relative to 1913 and the terminal point of which, here, is virtually 150, the last figure being October in 1927.

The retail food is the red line and that is very close to the wholesale commodities. 154.

The cost of living is represented by the dotted line and the last figure available is July, 1927, and was 173. We should expect the January, 1928, slightly in excess of that because of the upward tendency in recent months of wholesale commodities and retail food.

Q. Dr. Hollander, while you are on that point, I believe you have had occasion to testify some years ago with reference to the price level reflected by the wholesal commodities price index, and other evidencs of price level, and I think as long ago as four years ago you testified as to your own opinion as to the probable stability of the price level. Do you recall what your opinion was? A. I am glad to. I appeared in connection with the valuation case of the Consolidated Gas and Electric and then I think there was more discussion of the trend in prices, as to whether the then prevailing price index was a momentary one, from which there would be a post war drop, or whether it really was the beginning of a new price level. The testimony I gave was that prices are not topsy-like, just happen but are the result of definite economic forces, the volume of production and business on the one

hand and the volume of credit and money on the other and insofar as both conditions and policies were then apparent, it was likely that we were entering upon a period of price stability at or about the then level.

(Mr. Howard) When was that?

(The Witness) That was in March, 1923, and it's rather interesting to find at the end of 1923 the price index was in December, 1923, it was at 150, and in that time you see there have been drops of about 3% and rises of about 6%, but we come out exactly the point in October, November, 1927, where we were in December, 1923, and it is possible to state now with very much greater definiteness what it was then stated with I think as reasonable likelihood all of the tendencies which were then becoming manifest have shown themselves and have attained a new definiteness.

Q. So what would you say now as to the probable stability of prices in the next few years? A. I should renew my forecast with greater emphasis; that prices are likely to stabilize around 150.

Q. Now, Dr. Hollander, that figure is called the wholesale commodities price index? What is that index made up of? Just in a general way, and don't mention all the details. A. The wholesale commodities index, as I have it here, is based on some 400 very carefully selected commodities, covering the whole range of possible expenditures, and giving a weighted importance according to their prominence in the trade of the country, and made and reduced to relative percentages to the year 1913 as 100. Within recent months that has been replaced by a new wholesale commodities index, which enlarges the number of commodities from 400 some to 500 hundred some, gives them a somewhat different weighting. These would only be technical corrections, but the important thing is that the figures are now made relative not for 1913 but to 1926. The interest of that for the purposes which we have been discussing is that 1926 almost would seem to be regarded as a typical base, and 1926 with 150.

Q. That reflects the opinion you have expressed; that about the stable has been reached? A. That, I think, might be inferred from that.

Q. Now you say it's four hundred commodities. Of course, in arriving at the average of these hundreds of commodities, some of the commodities are decidedly higher and some lower than the average of some 150. A. Yes.

Q. Now commodities that directly or indirectly reflect labor to a large extent would be higher or lower than the average, would you say? A. Oh very substantially higher, provided that no factor is present to counteract that.

Q. Either the construction cost or the operation cost of a street railway system would that be normally expected to be higher or lower than the commodities price index? A. I am not an expert in the technique of railroad operation.

Q. In view of the amount of labor involved? A. But I suppose operating costs would be very largely labor, would they not?

Q. Yes. A. Well then certainly it would correspond in a general way to the trend of wages which goes substantially above cost of living.

Q. So that the operating cost of a street railway would be more likely to follow the wage curve than the commodity curve? A. And, of course, you see the significance of this. The wholesale commodity index is designed to show the alteration in the purchasing power of the dollar expended as it were, on all commodities in general, not of any one particular one, but assuming that it was expended on all commodities, and the fact that that index is 150, we will say, as compared with 100 in 1913 is equivalent to stating that the dollar is now 66c. I picture to myself accordingly a man starting out in 1913 with a dollar in his pocket to buy particular things. In the 14 years that have elapsed that dollar we will say has shrunk to 56c and the particular things that he desires to buy may have gone up in addition, so he has gotten it, let us say in that case, coming and going. The money in his pocket has shrunk and the prices of the things that he wishes to buy have increased.

So it would be in the expenditure for labor. There has been a shrinkage in the purchasing power of the dollar,

on the one hand, and owing to factors peculiar to labor the cost of that will have gone up still higher.

Q. So that a man or a corporation is buying labor, or the mere product of labor, not only has to pay more on account of the fall in value of the dollar, but he has to pay more dollars of the same kind than he would before? A. For the commodity which has appreciated intrinsically, in this case labor and conversely if he bought say agricultural products, he would be expending it for something which costs less.

Q. Because those prices have relatively gone down? A. Those prices have gone down.

Q. What would you say of the cost of construction of a street railway system. Would they reflect the labor prices or the lower prices? A. To the extent that labor is the dominant factor, or that commodities enter into it, which have advanced more than the change in the purchasing power, that would be the case and the answer to that resolves itself into an actual computation of construction costs.

Q. Now the chart that you have just referred to goes from 1913 to 1927. The index of the wholesale commodities price of the Bureau of Labor, not only has been constructed as you show it there, but that has also been carried as far back as 1890, hasn't it? A. Yes, certainly that far back, yes, I have here a publication of the Department of Labor showing wholesale prices from 1890 to 1923.

Q. Considering that pubication, giving the figures from 1890 to 1923, this 5-cent fare that we have been talking about didn't begin in 1913, but was in force 30 years ago, say in 1897. Will you tell the Commission how this commodities price index compared in 1913 with back in the '90's? A. Yes.

Q. Will you tell us what that would be in 1897? A. Yes, 63, all commodities, 1897, price series.

Q. That's 63 as compared with 100 in 1913? A. Yes.

Q. Are these other curves carried back to 1897, I mean

the cost of living? Was there any cost of living curve for that? A. I doubt it.

Q. And the wage index wouldn't go back that far? A. I doubt it, and we would be thrown back upon the general economic consideration that retail prices follow in the main after an interval of lag wholesale prices, retail food prices follow wholesale commodities prices, after a lag and wages follow after a lag retail food prices. That has been generally admitted, altho there has been some remarkable modification of it in recent years.

Q. Would you express any opinion as to whether the increase in wages, between say 1897 and 1913 was greater or less than the rise from 63 to 100? A. I would not express an opinion as to that as to the degree. I would say it would have been substantially up to 100, but in the absence of any statistical data, I would not say just what it was. That wages rose from 1897 to 1913 just as wholesale commodities did.

Q. Is there any reason to think they rose any less than wholesale commodities did in that period? A. No reason that I should think of and anything like a precise correspondence could not be given.

Q. The data doesn't exist then? A. No.

(Mr. Toole) Wasn't 1907 the panic year, Doctor?

(The Witness) 1907 was, yes.

(Mr. Markell) Not 1897?

(Mr. Toole) How about 1897?

(The Witness) 1893 was.

(Mr. Toole) We were out of it well then by 1897?

(The Witness) Yes, I think so. 1893 was the great year of the silver.

Q. Now to shift the subject, Dr. Hollander, there has been some discussion in this case about the subject of unemployment at the present time. I will ask you the question generally.

Please state to the Commission to what extent there is

unemployment at present in Baltimore, or in the country, generally and whatever you find the fact to be now, whether or not there is reason to anticipate any less unemployment in the near future, say in the next year or two. A. As far as precise statistical information goes as to unemployment, we in the United States do not possess it, as for example in England, where unemployment is made the condition under which the dole is paid. There are general statements made and opinions expressed and sometimes testimony given by relief societies and so on, but as far as actual accredited statistical information as to the amount of unemployment from time to time and from one locality to another, we do not possess it.

Now that those us back upon certain other criteria and one of these would be the volume of production, and another would be the volume of trade, the inference being that employment and conversely unemployment would be related to the volume of trade or the trend and tendencies in the volume of trade and the volume of production. Now there we are on safe ground, and I think here again, if you will be good enough to put up another chart in which I presented in graph form, the data collected by the Federal Reserve Board as to Production and as to trade, and it will perhaps make clearer what I have to say if I state a conclusion first.

The conclusion which I will wish to reach is that we are not suffering from any acute business depressions as far as the evidence is available, and to the extent that our present business activity is less than a year ago, it marks probably a rebound from a peak to a somewhat lower level, which is more likely to represent the normal degree of business activity.

Now there are really three curves here. The first is represented by this dotted line, which the Government collects the volume of production in some 40 or more basic industries and computes this volume relative to 1919 as 100. That is the line which comes to an end here in 1926 for the reason that at the end of 1926 in December, 1926, further collection of that was suspended and its place was taken by a related computation called Industrial Production. Here again there were technical alterations in

that more industries were taken into account, but the important fact was that it was made relative to the average production of 1923 and 1925, as 100 and it was then carried back by computation to 1919.

Now the last figure available here is September, 1927, which is 106, 6% higher in other words than the average production for three years, 1923, '24 and '25. Now that doesn't mark any period of depression or any period of inactivity. If we want that we come down to things like this (indicating). That marks a very considerable degree of activity above the three years preceding 1926.

Now on the other hand it does mark less activity than the corresponding period a year ago, but the corresponding period a year ago was a distinct peak as you will see, and it's quite likely that that peak was a peak and that we are going to move we are not going to keep up that pace, and we are going to move along a lower plane until we suffer another abrupt increase, so that as far as production is concerned, is the warrant for my opinion that we are not, as far as secure evidence goes, suffering from a period of cessation, or of considerable reaction, and to the extent that we are, as compared with 1926, it's likely to continue along that line until we have another abrupt peak.

(The Chairman) That shows an abrupt drop, does it not, Doctor, along from May, 1927, to September?

(The Witness) In May it was 111. In September it was 106. Perhaps I can read the figures for the months beginning with January.

(The Chairman) I just see by your chart from September it's an upward trend now, as marked as the downward trend was for May.

(The Witness) Yes, now, of course, it remains to be seen what the succeeding months are, but if you take the months of 1927 they are 106, 109, 111, 109, 111, 107, 105, 107, 106. That represents a pretty fair stability on a somewhat lower plane than a year ago, which was distinctly a boom year.

Now when you come to the other criteria. which is the

volume of business and that is mercantile business and merchandising generally and the authoritative evidence of that is the face value of the total checks presented on the banks of the country, outside of New York City, which is complicated by Stock Exchange transactions. Now the face value of all the debits presented to the banks or rather to the member banks of the Federal Reserve System, is regarded as a very fair indication of the degree of business activity.

Now there you have with this top line something of about the same general character. Here for example it showed up that's probably seasonal, to 138 which is as compared with this year, I will read the figures for the months of this year, beginning with January 145, 133, 134, 137, 133, 134, 132, 133, 138. There is no system there of business recession, altho taking into account the passage of a year, this is certainly relatively below the boom activity of 1926.

So contrary tho, it may be to what an individual may suppose or may experience, if we wish to stand on secure statistical ground, it seems to me that there is warrant for the two statements which I make.

Q. Have you any reason to think that those statements that you made on this general statistical information would be modified by any Baltimore condition that you know of? I mean is there any reason why what you say would not be properly applicable to Baltimore? A. I do not see that it should. It might work day by day or week by week, but after all, Baltimore is a cross-section of the general economic activity of the country. It might be that a certain industry is particularly represented, but that isn't what takes place in economic life generally.

Q. You are not aware of any economic condition in Baltimore that would make your general statement inapplicable here? A. No.

(Mr. Toole) Isn't there another factor in that industrial production. Doesn't an increase in machinery come in along there to a great extent, and if there were an increase of machinery, wouldn't you get the same production with less men, and there would be somewhat unemployment?

(The Witness) There has been introduction of machinery, Mr. Toole, but it hasn't been a matter of the last six months. That has gone on very notably as you know in the last six or seven years, but apparently it hasn't operated to the disadvantage of labor, because wages have gone up.

(Mr. Toole) The reason I ask you I think I saw the reports of the Labor bureau, I can't give you the chapter and page in which he says more goods are being produced now with less labor.

(The Witness) Quite so, and relatively there can't be no surplus of labor because wages have advanced. If there were a surplus of labor resulting from a release or the displacement by machinery that would promptly be reflected in a drop of wages, because after all unemployment is the means by which it's shown.

(Mr. Toole) Your figures deal altogether with organized labor. They don't deal with unorganized labor at all.

(The Witness) Insofar as we have figures of unskilled labor, they follow the same trend.

(Mr. Toole) You don't believe then that there has been any reduction in labor in the last year in Baltimore City.

(The Witness) In wages?

(Mr. Toole) Yes.

(The Witness) It isn't a question of what I believe, it's a question of what the facts state, and the facts collected show what has taken place, and of the facts that are not collected, I have no opinion.

(The Chairman) In other words, Doctor, you are not making your statements here on your personal observation of conditions?

(The Witness) None of my statements are made either upon the basis or fact or if they are opinions upon the attempt to apply economic principles to those, but what I have said thus far has been entirely based upon facts. These for example are merely converting columns of figures into graph.

CROSS-EXAMINATION

By Mr. Tingley:

Q. Dr. Hollander, taking your chart No. 1, have you that before you? A. Yes.

Q. Doesn't that show that the cost of living curve at the present time, in 1927, as compared with 1913, is 150 or about that figure? A. No, that's the wholesale commodities.

Q. Where does that show the cost of living curve? A. It is the dotted line. 173. This top line.

Q. Dr. Hollander, the curve representing the increase in wages of labor, particularly of organized labor, would be materially higher than one representing an increase in either wholesale commodity prices or the cost of living, woudn't it? A. Precisely.

Q. Which do you think would be a fair indication of the paying ability of the public at large at the present time?

NOTE: Question here reread by Reporter.

(Mr. Howard) You have three curves in mind in your question, haven't you?

(Mr. Tingley) Yes, sir.

(The Witness) By all means the curve of wages. If I may answer your question a little fully, Mr. Tingley.

We in the last few years have witnessed an economic development that is literally unique in recorded economic experience, and that is whereas prices have dropped, wages, instead of folowing it with a customary lag, have actually increased, so that altho food, for example, has shown this tendency and cost of living, a more moderate tendency, wages have gone up.

Now that has no parallel and is counted by many the explanation of American prosperity, and it means that the American worker by and large has a margin between his cost of living and his actual income, such as has never developed in this country, nor in any other part of the world before.

Q. Dr. Hollander as between the two curves representing the wages paid organized labor and unorganized labor, which would you think was the clearer index to use for the purpose of determining the paying power of the average individual, say the average rider of the United Railways? A. The average rider is a mere mental image. There is no such thing as an average rider.

Q. He is a very real person, is he not? A. No, he is not. There is no such thing as an average rider. The rider is a real rider and he is either one thing or the other.

Q. Are all the riders union laborers? A. No, nor are they all unskilled laborers, nor are they all bankers, nor are they all mendicants.

Q. They aren't all laborers, at all, are they? A. Precisely.

Q. Then would you think that a curve representing an increase in the labor or wages, either organized or unorganized, was a fair criterion to use in determining the change in service value of a street car system? A. I should say it was one of the important factors, but if I wanted to qualify the correctness, then I take up the question of the change in the income of the people of the United States.

Q. United States or Baltimore, Dr. Hollander? A. Of the United States. I don't think the people of Baltimore are very different from the people in the average condition in the United States.

Q. Don't you know that they are, Doctor, as to their average income? A. No, I don't know it and no one else knows it. Now the average income of the people in the United States, since you have raised this point, income for persons gainfully occupied, which means those who first receive wages, salaries and pensions, second traffics withdrawn from business and third dividends, interest and return received by individuals. Now that means that in 1913 all persons who were receiving average income or per person gainfully occupied was $864.00 and in 1926 it was $2,010.

Q. That's the average person gainfully occupied? A. Right. Now that's a nearer picture I should say of the average rider than to passing upon the skilled worker or the unskilled worker.

Q. Neither of them are very close? A. Neither of them are very close because there is no such person. That's what I meant by saying that the average rider was the picture of imagination.

Q. You took as your basis of comparison a five cent carfare in 1913 as representing the value of the service at that time. If the Commission found in January of 1919 that the value of a car ride at that time was six cents, and if you had used six cents instead of five cents in 1919 instead of 1913 your conclusions would have been quite different, wouldn't they? A. Am I to understand that that is a hypothetical question, Mr. Tingley; that if the Commission had, or did the Commission?

(Mr. Markell) We don't think the Commission did for a moment.

(Mr. Tingley) Call it a hypothetical question then and I will undertake the burden to show that it did.

Suppose I read you what they said:

"The authorities of highest repute are practically unanimous to the effect that the public should not be required to pay for a public service more than such service is fairly and reasonably worth, and the cost of rendering that service is merely one of the evidences of the fair worth of the same. This Commission has concluded from the facts before it in this case * * *."

This is January 7, 1927:

"* * * That the fair worth of reasonably adequate street railway service to the community served by the respondent Company— * * *."

That's the United Railways:

"* * * and under existing conditions, is six cents, as the basic rate for adults and four cents as the basic rate for children between four and twelve years of age."

Now Dr. Hollander taking six cents as your basic fare as of 1919 as your basis here, would or not that effect your conclusion which you have reached?

(Mr. Markell) If the Commission please, we have no objection to Mr. Tingley putting Dr. Hollander the hypothetical question that he put. When we come to argue this case, we are fully prepared to argue and explain that we don't think for one moment that the language that Mr. Tingley has read, if you read it in connection with the context of the opinion, and with the Commission's action, and what the Commission said in subsequent cases, we are perfectly satisfied that the Commission did not say what Mr. Tingley construes them as having said.

Now it certainly can't be helpful in this case to ask Dr. Hollander to construe that language of the Commission. We have no objection to his making his own assumption and ask Dr. Hollander to say if the Commission decided in 1919 so and so.

(Mr. Tingley) That's exactly what I have asked him.

(The Witness) I understand the question is now hypothetical. If six cents were to have been stated as the measure of the value of the ride, to the consumer in 1919, would——

Q. Your conclusion be the same? A. I see. I trust I am not guilty of any disrespect to the Honorable Commission, but if they said that in 1919 my answer to that hypothetical question is they said something that was wrong.

Q. That's not answering a hypothetical question. A. Isn't it an attempt for me to answer a hypothetical question which involves what not, in the popular sense but in the logical sense, is an absurdity?

Q. Suppose you assume it to be correct and answer the question, Dr. Hollander?

(Mr. Howard) The question is assuming this, then what?

(Mr. Tingley) Would his conclusion be modified?

(Mr. Howard) Would his previous conclusion be modified?

(Mr. Markell) What conclusion?

(Mr. Tingley) Is there any doubt about that Mr. Markell? Suppose I put it this way. There won't be any difficulty about anybody understanding this.

Q. (By Mr. Tingley) Assuming the six cents was the value of the car ride in 1919, what would you say the present value of a car ride was using either the wholesale commodities index or the cost of living curve, as you use it? A. Mr. Tingley, I haven't the slightest desire to evade the question or to quibble with you.

Q. I am sure you haven't. A. I simply don't want to make answer that will be misunderstood. My conception of the value to the consumer is something like this and this is preliminary to the answer. I shall not forget the question and I will answer it.

There are perhaps two hundred millions or more rides consumed in the course of a year, we will say. Now that covers a wide range, of at the top limit, we will say the ride that has a limitless value to the consumer down to the one that has a very limited utility to the consumer. And that is influenced by first what the fare means to him, second what the occasion for his using the ride and so on. That's what I protested against the inception of an average ride, when you are talking of as subjective a matter as the satisfaction which the ride gives to a consumer.

Now this may not be the legal meaning attached to it, but it is the economic meaning. Now what is the advantage to the man, let us say it to the rider whom we may call the marginal rider, what is the monetary expression——

Q. Doctor would you mind answering the question first and then give your explanation.

(The Chairman) I think the Doctor can go ahead.

(The Witness) Now what is the monetary expression to that? It's easy to use the term the value to the rider,

but the extent that I am acquainted with what the decisions have been on the matter, it seems to me that there is a lack of ability to convert that purely subjective phrase into dollars and cents.

Q. It's been converted into them, Doctor, by the Commissions and Courts. A. Perhaps, I will do best if I continue. Now what is the expression for it, insofar as an economist views it? It is the amount which a consumer pays when he buys anything, shoes or bread or whatnot, he is getting value for what he buys if he pays for it at cost of production with a fair profit, a fair profit we will say on a fair value. He never is obliged to pay more for that because competition enters to keep the price down. He can't in the long run pay less than that, because if he does the business breaks up, so you say a consumer gets a fair value for what he buys if the price which he pays is a fair return on the value of the property.

Well, now, I see no distinction between competitive business and regulated business in the sense that a regulating body, I take it is to exercise for a non-competitive business that same degree of control which competition exercises in the non-regulated business, and therefore I think the monetary expression is the amount of the value of the service to the community and assurance that he isn't paying any more than this fair return.

Now I come to my answer. If the Commission should have fixed six cents in 1919 as the monetary expression of the value to the consumer, it would have been because six cents was a fair return on the value of the property and therefore,——

Q. Let me interrupt just a minute. Are you stating that as a lawyer, or as an economist? A. I am stating it as an economist. I am not a lawyer and I can only speak as I am.

As I say, in 1919, a price was recognized as economically sound and surely no Commission, even hypothetically would utter a decision, which was not economically sound. If accordingly they fixed six cents as the fair return on the value, it would have been for the reason I

have given, and therefore in 1927 the fair price to the consumer would be governed by the same principal. That I think is as near an answer as I can make to your hypothetical question.

Q. Is that the only answer you care to give Dr. Hollander? A. Until the question is modified.

Q. And that answer is based on the assumption that the Company was earning a fair return in 1919? A. My dear sir, the entire question was hypothetical.

Q. Were you assuming that in your hypothetical answer? A. I was assuming that if hypothetically, the price was fixed by a regulative body in 1919 as measuring the value to the consumer that that fare would have been such as would give a fair return on the fair valuation of the property.

Q. It's your understanding that when a Commission fixed the value of the service in a given case, it does it on the basis of a fair return to the utility? A. As one of the elements.

Q. Dr. you assume in your comparison that the character of service, given by the United Railways and Electric Company was the same in 1913 and at the present time, didn't you? In other words, there had been no deterioration of service in the interim? A. I did not make that specific.

Q. It was included in the question and I thought perhaps it was included in your answer? A. It was included in Mr. Markell's hypothetical question.

Q. And you assumed it in your answer? A. Yes. I wouldn't have assented to it. I would have said that the service had improved very materially.

(Mr. Tingley) Thank you very much.

CROSS-EXAMINATION (Continued).

By Mr. Sobeloff:

Q. Dr. Hollander, even assuming the base of 1913 at 100, which you have assumed in your chart and taking into account the rise to 150 in 1927, doesn't the present

fare of 7½c reflect about the same increase as compared with 5 cents in 1913? A. If the expenditures of the Railway were exclusively on wholesale commodities, that would be true, but to the extent that they expend in wages, or labor, it would not be true, or to the extent that they expend on commodities which are above this average commodity. The 150 is attained by some 400 commodities, some of which are above, and some are below. Now if any purchaser has the bad luck to have to buy expensive things he is certainly not compensated by 150.

Q. That same criticism could be made of the chart for the year 1913, could it not? A. Yes, but we are dealing with an increase. We are not dealing with an absolute adequacy. Your question as I understood was assuming starting with five cents is 7½c not that corresponding increase.

(Mr. Howard) They both start at 100 in 1913.

Q. But it would require an enormous study of just what they spend their money for? A. Exactly, except that we may say that one notorious factor, mainly labor, is so much out of line with wholesale commodities that you can answer that.

Q. Interest on the bonds, which is a very large feature in the case, their expenditure, that doesn't change. A. That deals with a measure of computation which are facts of record.

Q. There is one other question I want to ask you, Doctor, just for my own understanding. You have the line cost of living, and I notice that fairly constantly from 1921 on, and that is considerably higher than either the cost of wholesale commodities or retail food. A. Yes.

Q. But that was not the case before? Can you explain that? A. The explanation of that is, that it includes lodging, that is, rent, clothing, fuel and those other things. Now those other things didn't come down in the same way that food came down, so the consequence is that retail food has dropped while cost of living has dropped some, but not as much. Consequently rent wouldn't drop as quickly as groceries, it's slower

and the cost of living includes sluggish elements, so that the composite is slower than the food drop.

Q. But it's been here right along for the last five years. A. Exactly so, but the trend is on the whole something similar you see.

Q. Yes, but it's always higher, whereas you started out at 100 for it. A. You see there was no counter part to this sharp drop in food. You see from 1920 to '22, which was the period of abrupt commodity drop, it was with the deflation that began in 1920 where they went down. Now you notice cost of living went down. That simply repeats the familiar experience that your house rent didn't drop as quickly as the commodities.

Q. It shows no tendency to drop down as low as the other lines? A. That remains to be seen. Here is a curious suggestion of what might happen in the spring of 1927. You will notice that food went up while cost of living showed a tendency to go down, and one's guess would be that ultimately there is a tendency to converge.

Q. For the past five years they haven't gotten any closer? A. I could give you the figures but the absorbing question is, of course, will wages follow that same trend; will wages, as heretofore they always have done, drop as the cost of living. Now if I put the wage curve on this chart, you would find it going up.

Q. Union wages? A. Well, there is no evidence whatever that unskilled, unorganized wages, it's a well known principle in the labor world that unskilled and non-union wages follow in a general way the course of union wages. I should hestitate very much to say that the course of unskilled or non-union wages was contrary to that of union wages.

(Mr. Markell) The index that you cited of the Federal Reserve Board included that kind?

(The Witness) That kind there is really not marked. you can fight over percentages, but the wages of all kind are approximately 220 does not admit of any denial because every economic, critic every financial report, of any competence, proceeds on that and trying to explain

why it is that wages are in excess of cost of living, and the conclusion reached is that the American worker in consequence of increased efficiency of organization has a new margin of expenditure as compared with any other kind.

Q. What was the rate of wages in the peak of 1920 as compared with 1913? Has there been a very great increase since 1920? A. I can answer that exactly. Here I will rely on Snyder where it says the average for 1920 was 207.

Q. Is that the peak? A. That was the peak up to that time and followed in 1921 by a drop to 194.

In 1922 to a drop to 189 and then it's gone on moving, 189, 205, 210, 214, 219, the very time that food and commodities and cost of living have at worst remained constant.

Q. But the wages are not much higher than they were in 1919 or '20 during that peak? A. As 219 bears to 207.

Q. I am comparing it with the time when the other case was before the Commission, in 1919 or '20, just about that time. The wages then were practically as high as they are today? A. See if this doesn't show the extraordinary character of the 1920 movement. In January wages were 192. In December they were 210. It was a boom period, while in 1926, January wages were 217, in December they were 222. There wasn't anything of that abrupt character.

CROSS-EXAMINATION (Continued).

By Mr. Clark:

Q. Doctor, I just want to ask you one or two questions. An important issue in this case is the value or the worth of the ride, and that is the reason for the questions that have been asked you up to the present time. I get your answer to that that the most determining factor in finding that worth is what a man is making, what his income is.

I am frank to say to you that that is the first time

I have ever heard of that method of determining worth or value of a ride, and I want to know whether you mean to sincerely stand by that. In other words, if I go out to buy a street car ride, it is the right of the Company to ask me what I make?

(Mr. Tingley) All that the traffic will bear.

(The Witness) No, Mr. Linwood. I never said that, and I am quite sure I didn't say what Mr. Tingley interjected. I said the value of that service to you expressed in dollars would be represented by an amount which would insure a fair return on the fair value of the property, which was the rule which prevailed in all competitive industries, that in all of your purchases, whatever you buy, if it is a really competitive commodity, you pay that which will yield the producer a fair return on the cost of production.

Q. All right. Now then, let me get you right there. Do you mean to modify your answers to Mr. Tingley to this extent; that what you determine as the method of arriving at value of the ride is the charge that will yield a fair return on value and not what the man is earning or what his salary is? A. I am not sensible that I am in any way changing what I stated to Mr. Tingley, so I do not wish by an affirmative answer to indicate that I have.

My statement was that the conception of an average rider, was a figure of speech, that there is no such thing as an average rider, when you wish to invoke such a subjective thing as the value of the service to him; that to assume that the 200,000,000 rides in a year represent a like subjective experience is fantastic.

Now, accordingly, you come to a conception of what is the value of the ride to the rider, who gets least satisfaction out of it. In other words, I will call them marginal and there must be a marginal ride. Now that marginal rides confers a satisfaction, the monetary expression of which, like the monetary expression of anything that he buys, will be fairly stated as insuring a fair return and no more on the fair value of the property.

(Mr. Tingley) Dr. Hollander, if revenue passengers

fall off after a fare increase would that indicate that you were losing marginal riders?

(The Witness) There are marginal riders in every case. If your fare were reduced, let us say to one cent, you would have more riders. If shoes could be bought for 50 cents a pair you would have more shoes bought, so just because there is that element of rise and fall some fair point has to be reached. If shoes were $50.00 a pair, fewer shoes would be bought. If shoes were 50c a pair, more shoes are bought.

Now at what point does competitive industry fix a price which it is right for shoes to be sold, and which expresses the usefulness of shoes to the purchaser? It is the fair business return, and I meant to imply that the principle to which regulated industry conformed was identical only instead of competition fixing it, regulation fixes it.

(Mr. Tingley) I think I understand your position now. Thank you, Doctor.

Q. (By Mr. Clark) Now Doctor, just show the relation of the wage and salary index to that conclusion. A. I will be glad to and I will endeavor to make my answer vivid even at the expense of seeming to be more specific as to amounts than I intended to, but here is what I have in mind.

An income recipient, I will not call him exclusively a wage earner, an income recipient in 1914 had an income which was absorbed by his cost of living with some margin. Now that cost of living has increased, but his income by every criteria that we have has increased more, and the consequent is that a large margin is available, and the deprivation of an increased expenditure is therefore less, certainly not more.

Now specifically I mean this; that the ordinary man may grumble but he realizes that he is suffering no hardship when his income has more than doubled and when he pays twice as much as he is obliged to for bread and milk and shoes.

Q. Now then aren't you coming back to what you

originally stated; that the measurement of the value of the rate is what the rider makes? A. No, I didn't say that, Mr. Linwood. The value of the ride is what the ride costs to the maker of the ride.

Q. Then if its what it cost to the maker of the ride, why do you use the salary and wage index? A. Because as evidencing the fact that the wage receiver let us say is getting much the best of the job, much the best of the bargain. If he has more money let us say, more than twice as much money as he had, and his cost of living has doubled, isn't he better off.

Q. Then you come back because he is better off—— A. No, Mr. Linwood.

Q. Mr. Clark, Linwood is my first name. A. Forgive me for my aphasia. Mr. Clark, suppose the wages have more than doubled and suppose the articles on which he expends it have, following the principle which prevailed before, doubled, isn't the expenditure of that amount less of a deprivation to him?

Q. Yes, that is an economic fact, but it just doesn't fit in this case. A. Well I am not concerned with it fitting into this case. I am concerned with the economic facts.

Q. Is the value of a car ride an economic study? A. It is to the extent of casting doubt upon determining the monetary value of a subjective thing.

Q. If I go out to buy a commodity then your conclusion is that the vender of that commodity has a right to ask me what I make for the purpose of determining what he should charge? A. He don't. That's why you get much the better of it, because what you buy means more to you than you are obliged to pay.

Q. Isn't it just as reasonable to assume that he has a right to ask me what I earn to fix the price of what he is selling me as it is for the company to ask me what I earn? A. Mr. Clark no one does that. No one gives a rap what you earn.

Q. I mean as a measure of the price which should be

charged for what I am buying? A. I haven't implied that in the remotest way.

Q. Now let's stop right there. You mean to say you have implied in the remotest sense that the price of the thing being sold shall be determined by what I earn? A. Precisely.

Q. That's all I want to ask you. I thought that was right, because I have a list of measurements of worth of service furnished by the United and I haven't in that list what a man earns and I haven't found it any where. A. Mr. Clark there are two hundred million rides, let us say a year. Would it be contended for a moment that the subjective experience of satisfaction among those two hundred millions could be converted into dollars and cents.

Q. No, certainly not. A. Well, would you say those two hundred millions are all identical persons.

Q. Certainly not. A. Then each ride means something different to each person. I exaggerate.

Q. Yes. A. Then will you confer upon the regulative body the duty of fixing, as Mr. Tingley says, the tariff according to what it will bear.

Q. That shows the absurdity of the conclusion of what I earn doesn't fix the value of what I buy? A. It has nothing to do with what you earn. That's only one of the factors. It's how much you want to ride. Two men may earn exactly the same. The one may want a ride very much and the other may not want it nearly as much. The one may need it going to work and the other may use it going to play.

Q. That's all, Doctor. But I just want to say one thing. If the value or the worth of ride is an economic fact and you are an economist, I refer you to the decision of the United States Supreme Court now by what is meant by the value of service.

(Mr. Tingley) I join in that.

(The Witness) I feel that lies beyond my province.

(Mr. Markell) But the change in earning power does

indicate, as you have just testified, the extent to which the rider is getting the better of the bargain.

(The Witness) The bulk of the purchasers of every commodity reap a subjective surplus. They get more satisfaction than they suffer deprivation. At the end of the list is the man who gets what he pays for in satisfaction. It's as much of a deprivation for him to pay as it is satisfaction for him to receive. He fixes the price, and that price must be enough to keep the producing concern a going. If he didn't it would go out of business. Now regulated industry or competitive industry are on a par.

CROSS-EXAMINATION (Continued).

By Mr. Toole:

Q. First I would like to ask this. What would six cents in 1919 be worth now? A. In general purchasing power?

Q. Yes? A. Well, 1919, suppose we say 225 at the end of 1919.

Q. I asked you about six cents. A. Can't we use a dollar just as easily?

Q. Yes. A. A dollar in general purchasing power in 1919 would have been worth say 45c.

(Mr. Tingley) How much is it worth today, Dr. Hollander?

(The Witness) Today it would be worth 66c. But remember I was talking of general purchasing power and not of specific purchasing power. The dollar in your pocket may have altered, but you don't value the dollar in your pocket, it's what you are expending it for.

(Mr. Toole) Six cents would be worth then something like seven and a half cents now? A. If it were used in buying 404 commodities.

Q. Yes, that's what I mean. A. But it isn't.

Q. How do you know? My six cents I am talking about. A. You are going to pay your fare, aren't you?

Q. I might own an automobile, I might say. A. I know if you had the 6c you would turn it over to the conductor.

Q. Now, Doctor, would you consider this question of carfare purely a matter of dollars and cents, an economic thing? A. No, and that gives me a chance for something I would like to say.

I was born in Baltimore and I have lived here all my life, and I believe that the important thing to the interest of the City of Baltimore is to have the best and finest railway service in the country, and I don't believe in paying higher fares any more than I do in paying higher prices for milk, or bread or what not, but I do believe that it's necessary to pay them which will permit the provision of absolutely tip-top service, which will permit the payment of fair wages, which will permit a reasonble return on the investment and make possible a cheaper credit, a lower credit, and I would like to look forward to the time when by a proper policy the street railways of Baltimore could be put on such a plane so that all of these things would be accomplished, and there after the citizens of Baltimore made partners in the reductions which ought to be possible and which would be possible and I believe it's more to the interest of the City of Baltimore that those things should be done than the mode of transportation upon which the bulk of its citizens depend should be starved and made mean and gradually run down. That's my belief, not as an economist, but as a citizen of Baltimore.

AFTER RECESS.

Thereupon—

JACOB H. HOLLANDER,

a witness of lawful age, produced on behalf of the applicant in rebuttal, having heretofore been duly sworn according to law and whose examination was suspended for the purpose of taking a recess, resumed the stand was examined and testified as follows:

CROSS-EXAMINATION (Continued).

By Mr. Toole:

Q. Doctor, your schedule of wages, they were based entirely on organized labor were they not, with the exception of one there where you had worked in it unorganized labor? A. The wages were corrected by the Department of Labor, rate of organized labor.

Q. Yes. A. But the wages collected by the New York Bureau of Labor Statistics and by the Federal Reserve Bank include all kinds.

Q. You don't know how the Federal Reserve Bank got their figures for unorganized labor, do you? A. I think from the pay rolls.

Q. These figures you represent, aren't they only abstractions, so to speak, rates? They don't represent actual money paid? A. That is the difference. I tried to call your attention to that. Those collected by the Bureau of Labor are union rates, so much per hour, but those collected and presented by the New York Bureau of Labor and by the Federal Reserve are of actual earnings, so much per week.

Q. It's actual money paid over? A. It's actual money paid over and would take into account part time employment or what not.

Q. Now in Baltimore you have no figures at all? A. Now I was speaking to Mr. Hill and he tells me that the figures of actual unskilled labor employed by the United have increased even beyond the percentages indicated for skilled labor and that jibes with my general intent.

Q. Did he tell you how many men in the United were working short time? He didn't tell you that? A. No.

Q. Did he give you any figures about the number of platform men that have a trip cut off a day or a couple of trips a day? A. We were speaking now of unskilled labor, men who use the pick and shovel.

Q. They have had the rates increased? A. Increased very much. I am not concerned with the United.

Q. The United is doing a little better by their employees than they used to? A. I should say unskilled labor, by the general evidence I gathered, and that's to be distinguished from this statistical data, had increased more than skilled labor, and the reason for it is obvious; that the pool out of which unskilled labor was recruited was immigration, and instead of getting from three-quarters to a million labor immigrants a year we get a net influx of perhaps less than a quarter of a million.

Q. Now one or two questions. If it don't satisfy the Commission it will satisfy my mind. Do you remember reading the address of the Secretary of Labor to the effect that we were passing through a new industrial revolution, and while it used to be that the labor displaced by machinery was taken up by the making of the machinery, now this has stopped and that men were being laid off in spite of the increased production? A. I did not see that, Mr. Toole, but it would be difficult for me to understand it provided it is as you set forth.

Q. The idea is this; that less men are producing more wealth with the aid of this new machinery. A. That jibes with what I have assumed, and that since less men are producing more wealth the share of each man is greater.

Q. That don't follow. A. But the exhibit as to wages and earnings shows it.

Q. I don't want to discuss that, but I don't think it follows, because men get laid off, and that's what's happening now. Now just a few other questions.

Granting that it is true that labor is better off today under these conditions, if everybody that had something to sell would increase the price of their product according to the ratio which labor has gone, would labor be any better off? A. If the increase in labor income were exactly and no more than the increase in the cost of living, and if all of his income were expended in the cost of living, that is, without any margin of savings, he would be exactly where he was before.

Q. Yes. A. But neither of those two assumptions are true. You don't want me to stop with a half statement.

Q. That answers what I want you to answer. What I want to ask then why do you justify then the United coming around and taking from him what he has earned? A. You see, that would have been the useful thing of allowing me to answer my whole question. I said the assumption which you made of an increase exactly corresponding to the increase in the cost of living and an income exactly absorbed is untrue.

Q. I didn't assume that. But go ahead. A. Now in the first place his wages have increased more than 100% and in the second place a larger market is available, so that whether it be railway fare or what not, 5c, 5c to the laborer, to the wage earner in 1913 as an item of expenditure meant more than 10c today.

Q. That's admitted. A. Then if that's admitted——

Q. But still might not the 10c today be harder for him to pay due to other conditions? You are only taking one social condition. Might it not be harder for the working man today to pay 10c in spite of all you say than what it was for him to pay 5c in 1913?

(Mr. Howard) You mean some individual working man or the average?

(Mr. Toole) I mean the average. We have to average, otherwise we will have to dock every working man in town and put him up there.

(Mr. Tingley) Is there an average working man?

Q. Well, we have to assume one like the economic man. It isn't true, but they assume him in political economy. A. You are not going to get me started on that. The Commission wouldn't listen to me on that.

Q. I have heard you talk on the economic man. What I mean is this. Let me give an example. A. Yes.

Q. If the Commission will pardon me, let us take the tailor. The tailors in Baltimore used to get a low wage, it was a low wage trade. In spite of the fact that their wages are falling down their wage is still much above what it was, we will say about 1910 or 1908, along there. Now, might it not be a fact that these men have a harder

time, after leaving the east side, moving up around North Avenue with better houses, better clothing, better food, better environment, may it not be harder for those men to pay 10c than what it was when they were working down town on a less wage? A. Now Mr. Toole you are getting on ground where I can speak with some confidence, because I am referee of the garment industry in Cleveland, and I have been referee in wage industrial conflicts in the garment industry in Baltimore repeatedly as you know. Now you are too well informed to entertain for a moment any doubt but that taking into account a monetary condition that the needle trade operatives are in a better condition today than they were in 1913.

Q. Their wages are higher? A. Yes. Now when you say that their use of the margin between necessary cost and actual income has gone into other things and that therefore they are naturally trying to keep these deferred expenditures down, why that may be so, that's one of the penalties which regulated industry suffers, they can't come before any tribunal and protest against the increase in articles of ordinary consumption, but here is a line of least resistance, but that any needle trade operative, to be specific, finds the 10c fare as much of a hardship as a disbursement from income as compared with a 5c fare in 1913 I deny completely.

Q. Hasn't his rent gone up? A. Yes.

Q. Don't you think the cost of living of the needle worker has increased much more than the average worker? I mean the scale of living he has taken up? In other words, he has moved into a different scale and a higher scale? A. That is the point. If he uses up, and I don't need to say how much I sympathize with his using it up, but if he uses up whatever margin he has in other expenditures and then complains that this goes up, I suppose that's human nature, but it isn't——

Q. But——

(Mr. Markell) Let him finish his answer.

(Mr. Toole) I know what he is going to say.

Q. (By Mr. Toole) Now isn't it true that under this economic system hasn't everybody gone to that man and sold him talking machines and pianos and encyclopedias and electrical apparatus around the house until he don't, even with his increased wages, have money enough to pay his expenses? Isn't that true? A. Yes.

Q. Then it really is a burden for him to pay that 10c.

Now there is something else I want to say. If you don't know, Professor, just keep quiet and I will answer it. Now you created a man. You didn't believe in the average man, but you created a man? A. Mr. Toole, you said the same thing. You couldn't bring two hundred million people on the stand here.

Q. I know that. You created a man that likes to ride like he likes to eat ice cream. A. I didn't mean to say that it was only a luxury.

Q. Are you ever on the streets between 6.00 and 8.00 o'clock in the morning and see the working men go to work and the working women? A. Yes.

Q. Can you imagine them liking to ride that way? A. I should say they like to ride rather than walk.

Q. Oh well. A. I am in earnest about that. They prefer, if the city, and this is entirely a suggestion with which you are in sympathy, if the city provided movable sidewalks and that no one had to pay anything, and as against that if they charged 1c, it would be a sacrifice. Of course anything that costs more than something else then that is a sacrifice.

Q. I suppose you don't get exactly my point, but what you say is true. I mean these people that go to work in the morning don't do it for pleasure, they do it because they have to do it. A. Right.

Q. The great bulk of the people that use the street cars have to do it. A. Right.

Q. They can't get to work any other way. A. Right.

Q. The building of the city has placed them beyond walking. If some of them walked they wouldn't have

strength enough to do the work when they got there. A. Right.

Q. Now do you know the rate of the people that work down at the American Tin Company? What they get as wages? A. No.

Q. You wrote a book not long ago, Professor, on the Abolition of Poverty, didn't you? A. Yes.

Q. A very nice book. A. The first kind word I have had.

Q. That was a very nice title? Now if this thing goes on, understand? A. Yes.

Q. This social question, you understand? A. Yes.

Q. The street cars are a social means of communication. A. Right.

Q. That the people can't do without? A. Right.

Q. Public service, public institution, the performing of public service? A. Right.

Q. Isn't there another way to look at it besides looking at it from the pure dollar and cent proposition like we are talking about it now, about the value of the service being so and so on? A. Well now, Mr. Toole, let me answer it just in as serious a strain as I can. Just because getting to his work promptly without loss of time, that is, not having to leave home in the dark and all that, is an important element in the decency of the wage earner's life. What is the policy to be pursued to insure the continuation of that? Is to give him momentarily or for a brief time a service at a cost which can not result other than in a breakdown, and insolvency, or is to give him a service at a charge which corresponds to that which he pays for everything else that he buys with the assurance, because that is one of the compensations of regulated industry, that there will be no swollen profits, but that any tendency for gains to go above a normal return will be, if necessary by compulsion, used for his advantage? I don't see that any advantage is conferred even upon the humblest worker of the city to delude him by giving him service at a cost that cannot be maintained.

Q. That's still the problem. That it can. A. That's all very well. Then it resolves itself—that was my assumption, Mr. Toole.

Q. What do you think would happen if the street car service did break down? Let's imagine all the working men went on strike tomorrow morning, don't you think within a week everybody would be able to get to work on jitneys? A. I am not willing to adopt that as an alternative. I prefer to think of the advantage of maintaining a nice service at high efficiency at a charge which does not give swollen profits.

Q. Here is what I am trying to get at, other witnesses testified that this additional fare would be a hardship taking all the conditions today as they are now, not like they were in 1913. A. Yes.

Q. Taking in the new standard of living, the new ideals of living; that the 10c car fare would be a hardship on most of the working people. Do you believe that or not? A. If a budget, a working man's budget has been warped out of shape so that these luxuries have entered and the necessaries have been crowded out as it were, and if you say that oh, he must pay these things but he oughtn't have to pay these other things, but the same would apply absolutely when the price of milk was increased, which was a hardship, but was there any possibility, was there any wisdom in trying to keep the price of milk at the old price?

Q. He could stop drinking milk but he must ride street cars. A. He couldn't if he had a baby.

Q. But all of them don't have babies. A. I don't know that many households don't have milk, and you wouldn't say that was an alternative any more than walking. You see if a man spends all of his money then if any items goes up it's easy enongh to say that's a hardship.

Q. Isn't it true now if the United takes away from the working man 50 to 75c a week more car fare and a dollar and a half a week to a family, isn't it true that it diminishes his purchasing power in other directions, and won't that have an effect upon this produc-

tion and upon employment and everything else? A. Very likely, but what is the alternative.

Q. Do you want me to tell you? A. No. This is the alternative if you will allow me to answer it. One element which is necessary to his, not merely to his comfort, but to his ability to continue as a wage earner, is assuming that immediate criterion attains, namely, that the charge is a fair return on the value of the property, he is getting that at less than he used to.

Q. Now oughtn't he get it in view of all this machinery that's gone in? Oughtn't he get it at less? Everything? A. The higher test is whether the thing functions, whether the concern can afford to provide it at that price. Is it a question as to the social advantage of fares say being 5c, or reducing fares? Of course it would be desirable.

Q. Then organization of capital then that can build up in certain ways and hide their profits from one industry to another, according to your idea, ought to be allowed to go on?

(Mr. Howard) What reference has that to the case? A. Remember I used the term constantly, a fair return on the fair value of the property, and the particular status of the United Railways isn't my concern. I submit simply in answer to the query that was put to me, what measures the usefulness of the service to the consumer, and I said the monetary expression of that would be a charge which would insure a fair return on the fair value of the property.

Q. Isn't the real value of the service for instance like this? If I organize a company and I go out here and make boomerangs, now if nobody wants a boomerang they are not worth anything, are they? A. No.

Q. After all, everything to have its change value must have use value? A. Right.

Q. That's fundamental in economics. Now if the United gives a service, following out this same line of argument, no matter what it costs to produce it, if it isn't worth it to the people, if it don't have a social val-

ue or a use value to it, why is it just then to count on the interest on the capital invested? A. May I not continue your own illustration?

Q. Yes. A. Now you have started this interesting factory of yours, and the product of it serves a use, otherwise, being a farsighted man, you wouldn't have started that factory. Now the price at which it is sold is less than keeps your plant going.

Q. Yes. A. How long do you think before not the public but you would be owning a boomerang?

Q. I wouldn't. It would go up and it ought to go up. A. Precisely. Now is it desirable that the United Railways go up?

Q. I think so. A. Then you have the advantage of a logical conclusion.

Q. I say if they can't give service at its social value it ought to go up. A. What was the social value of your boomerang factory?

Q. Why it didn't have any. A. Then it would hardly be less desirable to compare it with the United Railways.

Q. Even if the United would get 10c would that mean any more money for them necessarily in view of the fact that all the neighborhood business centers, the neighborhood movies would develop at the expense of those down town? In other words, people spend their money around their houses instead of coming down town? Isn't it true that that could happen, Doctor? A. Mr. Toole, there you are verging on a matter as to which an expression of mine would be of very much less value than those who have made a study of the experience of other cities. I can, however, refer to one economic principle which seems to me in the report I have read of the earnings has not been brought to your attention. It is the so-called elasticity of demand, and that is that commodities and services differ among themselves as between themselves, according to the degree in which an alteration in price will influence the amount demanded.

Now you can say in general that as the price of an article or service goes up less of it will be bought. As it goes down more of it, but all commodities and services are not alike in that respect. Those as to which the variation is very pronounced are said to possess a great deal of elasticity. Those to which there are little, to wit, the alteration in the price of bread would be comparatively little change in the amount demanded. An alteration in the price of cake would affect a great deal.

Now the question, therefore, is railway service marked by great or by little elasticity of demand, and the evidence presented insofar as I have seen it, which associates a shrinkage of traffic with the increase in rates and entirely neglects of almost catastraphic changes which have come over the general character of transportation by the introduction of the automobile are entirely misleading. To what extent an increase in the fare would discourage traffic depends upon the degree of the elasticity of the demand.

Now my own impression would be, and it is not anything more than an impression, that at the present juncture, when there has been elimination of what might be a considerable part of what might be called pleasure riding, cake consuming riding, when that has been eliminated, and you have gotten down as it were to something approaching the bare rock, the elasticity of the demand would be very small.

Now that's as far as you can invoke an economic principle.

Q. Unless it goes so high that it causes the buying of more automobiles? A. There again it seems to me that you ought to consider whether the buying of automobiles has been a consequent and in replacement of car use has been a deliberately calculated and intelligently calculated computation, whether people use automobiles in lieu of railroad because they have found it cheaper. Now as against that I think much is to be said; first, that it's a novelty, and second the humble users of automobiles are not accountants and haven't worked out and will not work out until the day of reckoning comes what the cost of automobile travel is as compared with street

railway travel, so that the substitution of the automobile for the street railway isn't there.

(Mr. Toole) That's all.

(Examination concluded.)

Thereupon—

C. D. EMMONS,

a witness of lawful age produced on behalf of the Applicant, having heretofore been duly sworn according to law, and whose examination was suspended for the purpose of hearing other witnesses, resumed the stand in rebuttal, was examined and testified as follows:

DIRECT EXAMINATION (Continued).

By Mr. Howard:

Q. Mr. Emmons, before we get into anything else I believe you have another one of those daily statements bringing the month of November up as near as you can to the present time, haven't you? A. Yes sir.

NOTE: Statement above referred to is here filed in evidence and marked Applicant's Exhibit No. 32 Rebuttal.

Q. Just in a word, Mr. Emmons, tell the Commission what that statement shows or indicates. A. This simply shows that we are still continuing to lose revenue passengers and passenger revenue, and that during the month of November to date, this was up to the 25th, I would like to read into the record from the 25th on, but up to the 25th we have only had two days of increase during the month. Comparing the month day by day we show a loss of $52,962 for 25 days or 4.58%. Comparing it by dates, 25 dates of the month of November in 1926 as compared with 25 dates in 1927 we show a loss of $59,726 or 5.14%.

This stopped with last Friday. Since Friday I have had at my office reports for Saturday showing a loss of $2,649, Sunday a loss of $1,944, Monday a loss of $4,971,

and yesterday a loss of $2,205. So that during the 29 days of the month we only have two increases with very serious losses.

Q. Now, Mr. Emmons, there were some exhibits filed by People's Counsel, I think they were Exhibit No. 29 that I am referring to, and No. 31 and No. 32 which undertook to estimate what your 1928 revenue would be on certain assumptions involving an additional transfer charge with a small increase. Have you anything in a general way to say about those? A. These are used in connection with a later exhibit endeavoring to show a little over 6 per cent, Exhibit No. 32.

Q. I included Exhibit No. 32 in those I am asking you about. A. Oh, I see, and it looks to me like the assumptions have been made by boosting up the passenger revenue and holding the depreciation amount down and cutting the expenses just to such an extent that the actual result shows a little over 6%.

I think there is a real fallacy in many of the figures used. In the first place, with a continuing loss of 5% at the present time, I cannot see how an increase of one per cent can be assumed for next year, especially if any additional charge is to be made and an additional one cent charge for a transfer.

Then they have assumed in that additional charge for a transfer $752,000 increased income which is entirely problematical, and also they have assumed $171,000 as charging our employees for their transportation, which is another exhibit, and which we will explain later is entirely an impossibility. If we charge the employees $171,000 it wouldn't come in the income at any rate. There are a certain amount of that would not be used and certain amount would be additional cost to use.

The question of charging a cent for a transfer has many objections to it. In the first place it shows up traffic because of the necessity to have the monetary exchange for a transfer. In the second place it charges the man who has not the convenient ride who goes from his house to his office and does not have to get off, it charges him more for his ride than the man who has a

more convenient ride, and it brings up the question all the time of rerouting so that everybody tries to get from their house to their office without this additional transfer charge.

Q. So in other words as a device to increase fares it accomplishes just as much as it may by that method and the increased fare is as much of a burden as the same increase in any other form? A. I should think so, and it's a burden to the man that's inconvenienced.

Q. How about the assumption of twenty per cent? A. that's entirely problematical. I should doubt that, especially when Mr. Wolf's exhibit No. 30 shows that nine out of twenty or nearly 50% would be short riders. If that should be so it looks to me that 20% would be very low for the deduction used.

Q. Now Passenger Exhibit No. 34 and 36 where one professes to be a correction of your own estimate for 1928, and the other professes to be a projection of your own estimate to three years into the future. How about them? A. Well in No. 34 they have boosted our rate of return which we ourselves figure at less than 7½% to 9.25 by a reduction of $1,180,000 in net depreciation account, and a deduction of about 120,000 dollars in operating expenses through a reduction of our claim for power additional cost and for additional cost of accidents, and also the elimination of $75,000 item in the taxes. By thus raising the amount available for return, and by reducing the rate base to $75,000,000 they show something over nine per cent, but I feel that that's not a correct statement.

I think this statement that Dr. Hollander showed this morning shows that the 3 per cent reduction that Mr. Wolf made because of the commodity prices is all in error, because the Doctor——

(Mr. Tingley) That three per cent reduction is not in this Exhibit, is it?

(The Witness) No, but the way Mr. Wolf said he got the $75,000,000 he made a three per cent reduction on account of commodity prices.

(Mr. Tingley) In the cost of construction.

(Mr. Howard) That is the very point. That was based on a fall of three per cent——

(Mr. Tingley) In the cost of construction.

(The Witness) It was based on the commodity price index and I hold that that's wrong.

(Mr. Markell) There wasn't anything else in the world that was meant.

(The Witness) We can introduce our cost of construction today and show that our increased expenses are more than they were before. I think that's all I have to say, Mr. Howard.

Oh, on Exhibit No. 34, that's just a question of continuing that three per cent. on into 1929 and '30 and getting the curious result which he has compelled us apparently to go to 11 cents in 1930. We made no effort to prophecy as to either 1929 or '30.

(The Chairman) You did say, however, Mr. Emmons, did you not, that if the ten cents shouldn't prove sufficient that you would then have to consider the question of zoning.

(The Witness) I did say we would probably have to try some other arrangement and get something on the distance haul.

Q. Before you went above ten cents? A. Before we went above ten cents, yes.

(The Chairman) You did have in your mind the possibility of ten cents not being sufficient at some time?

(The Witness) Some person asked that question, if ten cents were not enough what would be the next move, and my answer was that I felt the ten cent base there was possibly all that any short rider should be charged and that meant increment in some other form.

Q. These exhibits on depreciation Mr. Hill testified on that point rather than you, didn't he, Mr. Emmons? A. Yes, he did.

Q. And I don't think there is anything to add in your

testimony? A. I think your cross examination brought out the fallacy of those exhibits, Mr. Howard.

Q. People's Counsel Exhibit No. 44 was one showing the amount of your property appraisal costs and the amortization of them. Have you anything to say about the reasonableness of those? A. Only this. Mr. Nodder made the suggestion that the stockholders should take half of it and the car rider the other half and we should have the car riders taken up by the elimination of the Valuation Department. The valuation was not sought particularly by us. It was started way back in 1914 by the Commission and finally carried through, and it seems to me is a proper charge to be amortized entirely, and also I think I explained yesterday the absolute need of a continuation of a Valuation Department.

Q. Now, Mr. Emmons, People's Counsel Exhibit No. 45 is an exhibit that undertakes to show that you save $171,883 by abolishing the item of free tickets to your employees and park concessionaires. Is that true or not? A. I think that's absolutely unlikely in any way at all. There are a great many reasons why it would be unlikely. In the first place a great number of these coupons are used in Company business so that the Company would either have to still furnish the employees using the coupon books.

As far as the concessionaires are concerned it's part of our contract with them and we would likely have to pay that much more additional otherwise.

Q. Why do you put it in the contract? Because you are a good fellow? A. No, because it's usual in concessionaires' contracts to have that item taken care of.

Q. And is it usual to issue free tickets to employees in other companies? A. I know of no company that does not. I might say this; that under association coupon books there are $161,000 of them. We have about 4,000 employees using those books and it means about $40.00 per year to an employee. Of course if we charge those employees for those books it isn't at all likely that they would use them to any extent like they use the free books, but if we did charge them it is quite likely we

would be asked for a wage substitution to take care of that. One cent an hour average employee would mean just about the $40.00 a year, so I do not feel that we would save any of that. If we would attempt in any way at all to do that it would be something that other companies do not do. I think we would lose the loyal support of the employees that we have and would interfere seriously with our operation.

I might say just in passing that the Gas Company, in furnishing tickets to their employees for such as use them, and we all know they have a large number of automobiles that they use, spend with us $42,000 a year just in purchase of tickets, so you can see somewhat of an expense item that we would have to take care of did we not ourselves furnish the free transportation.

(Mr. Tingley) Those were all eliminated, Mr. Emmons.

(The Witness) No they are not eliminated. For instance coupon pass books, male, the first two items, are books that are issued almost entirely to the superintendents and instructors of whom there are 67. They are out on the street all the time, jumping on the cars. We would have to take care of that kind of transportation.

(Mr. Tingley) I thought you were speaking of the Gas Company.

(The Witness) Oh, I thought you meant our own.

Q. Now, Mr. Emmons, People's Counsel Exhibit No. 46 is in the main their method of bringing up to date your valuation as found by the Commssion? A. Yes.

Q. What are some of the items they have eliminated there? A. Two gross, to my mind, absolute errors in this exhibit. The first is the deduction of $90,259 grants made of construction. That was money donated by the Government in the cost of building the terminals at the Bethlehem Ship Building yards.

Q. Before your valuation or after? A. That was before the valuation. It was included in the valuation. The property is ours.

Q. The property was built at the time of the valuation, wasn't it? A. This was before the valuation.

Q. It was finished at the time of the valuation? A. Yes.

Q. So you know of no reason whatever why they should be excluded? A. Should not be excluded. Then Mr. Nodder has deducted 20% of labor for cost of removal of track. I think Mr. Howard on cross examination brought that out. That's just as much a cost of the new track that's in place and should be included in the valuation as of today, maybe not as labor taking out old track, but under the theoretical setup of the valuation of track being put in paved streets it would cost just as much and perhaps more to put that track in a paved street, especially a concreted street than to take up the old track, consequently we feel that this elimination of those items is absolutely incorrect.

Q. It is not a fact then that it costs more to take up old track rather than to lay a track in a street where there has been no tracks to the extent of 20% of the cost of the track? A. It does not, no.

Q. Anything like that? A. No, I think not at all.

Q. In you opinion I understand you to say it doesn't cost any more at all? A. No, it doesn't cost any more at all. In fact, Mr. Howard, there are some places that it's an advantage to have a track in the street because we put track jacks under the track and pull the whole street up with it whereas we have to dig it out if the track isn't there.

Q. Would you refer back a moment, Mr. Emmons, to People's Counsel Exhibit No. 42 on Depreciation and look at the second sheet of it and there is an item there of uncompleted work charged against the reserve $572,-792. A. Yes, sir.

Q. In other words all such work is eliminated in this calculation, isn't it? A. It is, yes.

Q. To the amount of five hundred and seventy-two and odd dollars? A. Yes.

Q. What have you to say about that? A. That is money already expended and is properly chargeable to three different accounts, first the replacement cost, under the Commission's original ruling it's chargeable to three different accounts, first is the replacement of the original cost, second is the addition of the replacement of the former type track at present day cost and the third is the added cost which is really the capital cost.

Now under the valuation we feel and I think the testimony has already shown that it is absolutely necessary to obtain the valuation that replacements now be made at valuation cost, consequently we figure that out of this $572,000 there is only some year perhaps thirty or thirty-three thousand dollars added capital, that all the rest should go to the depreciation cost, retirement cost.

Q. Have any allowances been made to you in any of the depreciation calculations for that part of that item? A. No, there have not been. They have in that same exhibit a deduction of the depreciation account paid to the Gas Company, Mr. Howard, which Mr. Nodder himself testified had been agreed to by the Auditor of the Commission at the time when consented to by the Commission, or rather, as he put it, been advised by the Auditor of the Commisson, the then Auditor of the Commission was Mr. Dunn, and consented to by the Commission.

Q. Now Mr. Emmons passing over these statements that are tables made from the books I think the next I come to is People's Counsel Exhibit No. 49 which is a statement giving what it calls your average rate of interest on indebtedness as of September 30th, 1927, and I believe it has already been brought out that that is the nominal rate of interest and not the real rate to the Company taking into consideration the price of securities sold.

(Mr. Tingley) You mean the price at which securities are sold by the Company to the bankers?

(Mr. Howard) The price the Company realzies on the securities.

Q. (By Mr. Howard) What have you to say about this exhibit? A. Well we have had figured up to see what the present yield is on our various classes of securities on the present market value.

(Mr. Tingley) Yield to the investor, Mr. Emmons.

(The Witness) Yield to the present investor on the present market value.

The underlying bonds, present market price averaging around par, the yield is almost five per cent, 4.98. United Railways securities in themselves, the first 4s, first 6s, refunding 5s, 6% notes, and income 4s, average 6.13.

Q. Is this information on the table that was provisionally filed when Mr. Fenhagan was on the stand? A. No, this is just a memorandum. The Maryland Electric shows an average of about 5.71 on market yield.

But the securities we have issued since 1920, and which Mr. Fenhagan testified about on Exhibit No. 31, shows that the securities issued July 1, 1920, which have since been retired, cost the Company 9.38 per cent. The ones issued January 15th, 1921, also been retired, cost the Company 8.70 per cent. The ones issued March 1, 1922, cost the Company 6.75 per cent. The ones issued March 1, 1922, coincident with the one I just referred to cost 6.60 per cent, the first being the $6,000,000 consolidated 6s, 4s converted into 6s, that was a distinct sale of the 6,000,000, the second being a substitution of December 1st 4s for 6s by the payment of $250.00 per bond, which I believe you will remember, and August 1, 1922, an issue of 5 Year 6% notes which have since been retired cost 7.27%. January 1, 1924, an issue of Series A 6½% Maryland Electric Railways First and Refunding Mortgage Bonds cost 6.93%, and the last issue of 6% notes, three year notes, cost 7.32%.

(Mr. Tingley) What's you dividend rate on your stock?

(The Witness) You mean on the par?

(Mr. Tingley) Yes.

(The Witness) 4 per cent.

Q. Mr. Emmons, the Exhibit filed this morning as Exhibt No. 31 is a tabluation of some of those figures? A. Yes, I was reading from that.

Q. The one filed this morning is correct, isn't it? A. Yes, it is.

Q. Have you any comments to make on the general situation shown by that? A. With the exception of this: that money is costing us around 7% or over, and I have this comment to make, that I think the Commission have been advised in the other case that our need of credit is extremely great. We have before us in the next five years refunding to the amount of about $5,000,000. We have before us a desired construction program of about $8,000,000, which includes new cars, includes automatic substations and a good many things of that type which we would like to do, but we have at least the absolute necessity of $9,000,000 on refunding.

The Commission can very readily see there is quite a difference in the ability to obtain that money if we have credit or if we haven't, and quite a difference in the ultimate cost if without credit we have to pay seven per cent or if with credit we could get it for six.

Q. Now, Mr. Emmons, People's Counsel Exhibit No. 50 was a statement of your notes outstanding on September 30 and showed a rate of interest of from 4½ and 4¾ to 5%. Have you continued paying these same rates since? A. No, the first listed, the once due October 27th, have been renewed.

Q. At what rate? A. And it was necessary to increase the rate to 5%. The ones due in November, 1928, we were able to in New York renew on the same basis, 4½%, but all of these are under a requirement that the banks have of maintaining a twenty per cent deposit.

Q. In other words, when they lend you $100,000 you have got to agree to let $20,000 of that stay with them through the loan, is that right? A. That's right.

Q. So you really only get a net loan of $80,000 in that case? A. Yes.

Q. And therefore your real or vital rate of interest is higher than indicated? A. It's more than 6 per cent., yes.

(Mr. Tingley) Do you get interest on the deposit, Mr. Emmons?

(The Witness) Yes, but even figuring the interest on the deposit it's even more than 6 per cent., 6.05 we figure.

Q. And they are three months loans, aren't they? A. Those are three and four months loans.

Q. Look at People's Counsel Exhibit No. 47. A. Yes.

Q. There are two items there that they profess to eliminate, one interest on Bethlehem Steel Company construction. Did you pay that or not? What is that? A. That certainly should not be eliminated because it's in the nature of a rental to the Steel Company for construction work. It's been explained that the Steel Company did not wish to give up any of their property so they arranged to construct the tracks through the property, own the tracks on which we pay a rental basis.

(Mr. Tingley) Do you know that that's eliminated on your Exhibit No. 24, Mr. Emmons?

(The Witness) I don't know that it is.

(Mr. Tingley) It is.

Q. That property that you are paying rental on therefore wasn't included in your valuation, was it? A. We do not own it, no sir.

Q. Now commissions for paying coupon interest, is that an ordinary expenditure or not? A. I must confess I am not sure about that, Mr. Howard.

(Mr. Tingley) On that other item, Mr. Emmons, we just followed your Exhibit No. 24.

(The Witness) The fact is we do not own the property. It was included in the valuation and we have to pay for it in the form of rental and we have made an error if it's not included. This cost of paying coupon interest is an item of expense. It's a necessary expense.

(Commissioner Harper) Is that paid to the banks?

(The Witness) That's paid to the banks, yes. I would like to say further about this Exhibit No. 47, Mr. Howard, the rate bases I think are taken too low, by which in taking the rate bases low they have shown a return of a little over six per cent in two of the six items.

(Mr. Tingley) That other item was taken off of your Exhibit No. 24, too, Mr. Emmons.

(The Witness) That may be true. I am not sure.

Q. Will you refer to the exhibits that were filed by Senator Benson in connection with the Halethorpe end of this case? Now I think instead of going over those exhibits one at a time, which would take longer, if I asked you one or two general questions on the subject we will get over it quickly.

First of all, Mr. Emmons, does the Halethorpe line pay expenses or not? A. It never has.

Q. It never has paid expenses, you say? A. No.

Q. How about the Dundalk line that has been so much contrasted with it? A. Always has been one of our best paying lines.

Q. Now, without my asking you particular questions, you have seen these exhibits that were produced, and you have heard what the witnesses have said about Halethorpe, what have you to say to the Commission in reply to the charge that you are making an unjust discrimination against that community or against the builders or operators who are trying to develop it? A. We are of course carrying out the orders of the Commission, and we feel, as I have said before, that the City limits are the natural limits of the first initial fare. I think every place that it is not the limit of the fare there is some definite reason in the Commission's mind rather apparent, either the line is a very slight distance over the City limits, or in the case of Dundalk, the Dundalk Junction forced a rather overly long distance outsde of the City on a sloping line down through Dundalk.

I went out Sunday to Halethorpe to see the situation,

and I was quite amazed at the development the Senator had out there, and felt they had been pretty good real estate developers.

Then I swung around to Frederick Road and Edmondson Avenue and I noticed over there beyond the first fare there was quite a large development.

I swung then over to York Road and found Anneslie and Stoneleigh very fine developments.

I went on over to Hamilton out to the Carney Road and found beyond Taylor Avenue quite large developments.

At the same time I see within the City limits a great deal of still undeveloped property, so it would look to me like the developers of Halethorpe have been very successful, but it looks to me also there are other people who have the same difficulties of a second fare and seem to be getting along with them as the Senator has.

Undoubtedly there must be some limit to the first fare. Now, if it can't be definitely the City line, and there is some excuse for extending it over it and not go indefinitely beyond the City line, because if the City line is a reason for a limit of fare, then the distance beyond the City line should be measured by other localties, and as I brought out before Towson is just as far over the City line as Halethorpe, admitting it is a longer haul all the way out there, but I am quite sure we would have the same contention.

I heard this mornng of a contention that they want a single fare to Ellicott City instead of two fares. Carney is just the same distance out from the City line as Halethorpe. So that there is some place that the limit has to be drawn, and as we remarked before, that if because some of these other lines are extended beyond the City limits, and it looks like that is a reason why the Senator feels that is a discrimination, there are two ways to stop the discrimination, one is to lower his rate to the City or the other is to raise the rate outside the City.

Q. Where ever a far zone stops you inevidently have the apparent discrimination of somebody who says he

only rides 200 yards further and he pays the whole extra fare? A. We generally have that.

Q. That's inherent in a fair zone system? A. Yes.

Q. I believe you have had prepared a graph or plat showing insofar as dwelling permits are affected, showing what the course in building generally has been?

(Mr. Tingley) Is this regarding Halethorpe?

(Mr. Howard) This is in reference to Halethorpe.

NOTE: Plat above referred to is here filed in evidence and marked Applicant's Exhibit No. 33 Rebuttal.

(The Witness) If the Halethorpe people feel that a failure of building activities out there today is due to their conditon, that there is a general slumping of building activities, this shows the years 1925, '26 and '27, showing that 1926 fell materially below 1925 and 1927 is materially below 1926.

Q. There is nothing further you want to say is it Mr. Emmons? A. I was questioning Mr. Howard whether we should even submit the fact that this Halethorpe Exhibit F, showing list of manufacturers employing more than 100 people served conveniently by the No. 3 carline enroute from Halethorpe before reaching Baltimore and Howard Streets, we have had an analysis made of that list with this result; that on the list of 53 factories there are only four of them that are directly served by the No. 3 carline, and by none other. There are two served by the No. 3 carline and by the Monroe Street bus line; there are three served by the Halethorpe carline and one other line; there are three served by the Halethorpe line and two other lines; there are eight served by the Halethorpe carline but by four other lines; there is one served by the Halethorpe carline but by five other lines; there are four that are served by six other lines; three served by seven other lines; there are eight served by eight other lines; there are six served by nine other lines; there are three served by ten other lines; there are two served by eleven other lines; there is one served by twelve other lines; there are three served by thirteen other lines; there is one served by six-

teen other lines; there is one served by twenty-six other lines. So I just give that so that the Commission will not have the impression that this list of 53 factories, all of them, would have any tendency whatever to use the Halethorpe line entirely if there was a change in fare.

Q. There are not fifty-three factories then there dependent only on this line? A. I would say there are only four.

(Commissioner Harper) Did I understand you to say that Halethorpe has never been a profitable line?

(The Witness) No, it never has.

(Commissioner Harper) Has there been an improvement since the extension of the No. 3 car line.

(The Witness) Yes, a decided improvement, and apparently it has had a marked effect on having the double truck car out there and having two men on the car, and also running down in the center of the city. Those three items I think have made quite a change on the income on that line.

Q. And when did that change take place? A. It took place December 1, 1926, as a part of the re-routing program.

CROSS EXAMINATION.

By Mr. Benson:

Q. Mr. Emmons, of course your suggestion that the Halethorpe line has never paid as compared with the Dundalk line, you can't make any comparisons between the Halethorpe line, for instance, and the Overlea line, because you can't separate that end that's been having the preference all these years, can you?

(Mr. Howard) I think his statement was an absolute fact; that it never did pay the expenses; not likely to compare them.

(The Witness) You bring in the Overlea line now, Senator, in what way.

Q. I bring in that you can't tell whether the Overlea

line, if it had an extra fare on the other end of the line would have paid or not? A. No, I couldn't tell that.

Q. Overlea is also in the county, isn't it? A. I think it's shown to be three hundred feet in the county.

Q. Now those people that live 300 feet in the county and those people who walk to the end of that line all enjoy the same county taxes that Halethorpe enjoys, don't they? A. Undoubtedly, yes.

Q. It doesn't make any difference, as far as the taxes you pay whether you live three hundred feet in the county or three miles, you pay county taxes, don't you? A. Or three feet, I guess, yes.

Q. And even those people where you run exactly to the county line, you can't differentiate from the people who live over in Baltimore County and ride on your railroad and those in Baltimore City and collect any greater carfare, can you? A. No, if they walk to the city limits.

Q. If they walk to the city limits they have the same privilege and the same fare as those people that live in the city haven't they? A. That's right.

Q. And I take it that if the Halethorpe line were paying $250,000.00 a year gross, and much of it were profits, you would be more willing to give us one fare out there than you would because it's been a loss out there? A. It would make a little different situation, of course. Q. You would be more willing to get it up? A. That would make a little different situaton.

Q. You would be more willing to give it up? A. No, I don't think I would be willing to give up my idea that the city limit is the limit of the city fare.

Q. But you did give it in Dundalk Junction and went a mile and six-tenths to the county? A. We were compelled to give it up.

Q. I see. You were compelled to give it up? A. Right.

Q. And you went a mile and six tenths into the county? A. We were compelled to do that.

Q. You went out to Taylor Avenue a mile beyond the city, on the Harford Ave. line? A. We were compelled to do that.

Q. You went out to Woodlawn a mile beyond the city line? A. We were compelled to do that.

Q. You went to Lorriane Cemetery, took over a railroad that wasn't paying, and I am going to make a guess is not paying as well now as the Halethorpe line is? A. Well, it's now a part of the system, I couldn't tell whether it's paying or not.

Q. Well, it wasn't paying when you took it over? A. It was looked upon as a liability and not as an asset.

Q. It was not paying as well as the Halethorpe line? A. No, it was not.

Q. And you took that over, didn't you? Now you made a statement here a little while ago, that you thought that if you got beyond ten cents for a short haul that you thought you might have to zone. Now does it make any economic difference to you in a case when the Commission has established in several other cases, particularly in the 1924 case at Dundalk that five and three quarters miles approximately from Charles and Baltimore Street by air line, even though that air line carries you across the river and there is no way of getting there by air line, was a fair haul for one fare as compared with these other sections, even though it's a mile and six tenths in the county, you think that it is still unfair to you to put Halethorpe on this same measure as you put Dundalk? A. I can't do anything more than reiterate the thing that I feel that the city fare——

Q. Why reiterate? A. That's all I can do is to reiterate.

Q. What you feel is everything in the city should have one fare? Q. That's right.

Q. I agree with you that far.

(Mr. Markell) The Commisson has said it should.

Q. Yes, I understand that. Now if that is true, but

you have extended out into the county different distances and in those extensions you have not made the city boundary the measure in any case, have you? A. The extensions have not been willing extensions on our part, and this case is up to the Commission to decide it.

Q. I understand that, Mr. Emmons. I am just trying to get at the facts, but there have been no extensions made from the city boundry as compared with other extensions from the city boundry, have they? A. I didn't quite get that.

Q. I mean the extensions that have been made out into the county, have been made counting from the center of the city, and not from the boundary? A. I think all the extensions have been made in connection with the amount of the track beyond the city limits. I don't think any of them have been made with the idea of a measure from the center of the city.

Q. Didn't you read the decision in 1924? Didn't you hear us read it into the record, where it said that the distance from Charles and Baltimore Streets gave the zones in the Commission's opinion.

(Mr. Markell) They were speaking of zones that were limited in the city limits.

(Mr. Benson) They were not, because they went to Dundalk which was beyond the city limits.

(Mr. Markell) That was merely incidental to the city limits.

Q. Now I ask you, if you didn't read that opinion? A. I read it, yes.

Q. Don't you remember it? A. I remember it, yes, but the question wasn't a question of distance out there when it came to Dundalk, it was a question of getting those two lines together, so that——

Q. The Commission didn't say that in their opinion. A. But I know the reasoning that they had.

Q. But they didn't give that in their opinion? A. No.

Q. They gave their reason that it was an unjust dis-

crimination against that section to require them to pay two fares to Dundalk Junction, didn't they? A. I didn't write it. I think they said something like it.

(Mr. Markell) They didn't say that.

(The Chairman) I don't think so, Senator.

(Mr. Markell) They said it was unfair to make them pay two fares to the city limits, and as Mr. Emmons said they simply said Dundalk Junction for reasons that they didn't express, but which were eminently those which Mr. Emmons just gave.

(The Chairman) The purpose of the Commission was to enable the people living in the neighborhood of Patterson Park and Central Avenue and Broadway to get down to their work in the extreme eastern end of the city and perhaps a little over it for one fare instead of paying two fares as was the case at that time. Now if the opinion of the Commission reads any differently from that I will be very much surprised.

(Mr. Markell) It doesn't read any different.

(Mr. Benson) Now if the Chairman please, I hope that I am duly respectful to the Chairman of the Commission, but the Commission on page No. 13 of their opinion says:

"The length of the ride from the center of the City to the end of the first zone on these three lines is three miles. The length of the ride on the Belair Road, Harford Road, York Road, Roland Park, Mount Washington, Pikesville, Gwynn Oak, Hillsdale, Edmondson Avenue and the Frederick Road or Catonsville lines, is in each case over five miles * * *"

Now I call the Commission's attention to the fact that a number of those lines extended into the county at that time.

(The Chairman) That's true.

(Mr. Benson) Now then——

(Mr. Markell) Read the Commission's conclusion.

(Mr. Benson) (Reading):

"* * * from the center of the city and on some of them it is possible to ride over eight miles for one fare. If the 3 cent transfer charge on the Curtis Bay line—South Baltimore—were to be eliminated the length of the ride from the center of the City will be only five miles. It will thus be seen that the eastern and southeastern sections of Baltimore City, as compared with the northeastern, northern, northwestern and western parts of the City are discriminated against."

(Mr. Markell) But it didn't say Baltimore County.

(Mr. Benson) I understand, but incidentally at the same time they ignored entirely the southwestern section of Baltimore City in that opinion. It wasn't called to the Commission's attention, and when you did get ready to remedy that inequity that existed in the southeastern section, you went out into Baltimore County and did it.

(Mr. Markell) On the very preceding page the Commission commented on the fact that last year the extensions included extensions to the city limits on the Halethorpe line.

(Mr. Benson) Yes, I know, but it don't make any difference when the Commission commented on in a preceding case, in this case they extended into Baltimore County.

(The Chairman) They did.

Q. Now Mr. Emmons this exhibit we filed with reference to these factories along the No. 3 line, there isn't any on there that aren't served by the No. 3 line, are they? A. No, they are all possible, but some are three blocks away.

Q. Now you don't mean to say that the Dundalk line serves all the factories down in that section of southeast Baltimore we compared with, do you? A. There has been no claim of that.

Q. I mean but neither have you made any claim that this is the only one. In addition to that when we took in our other exhibits the southeast Baltimore Section that included in our natural territory not only Highlandtown

and Canton, but on down to Federal Hill and down Locust Point? A. Which other exhibit do you mean? The one about buildings?

Q. No, the exhibit about the factories.

(Mr. Howard) The four quadrants with the density of factories.

(Mr. Benson) Yes.

(The Witness) I didn't analyze that.

Q. Well, it's just as true of the Highlandtown and Locust Point section that there are different car lines and different ways of getting there, and that no one section of these factories is served entirely by any one line? A. That would be true.

Q. For the purpose then that we introduced our exhibit to show that people could live on our carlines for one carfare it would serve the purpose, wouldn't it? A. Yes.

Q. Now on these other lines that serve that section they can do it and live greater distances, these other lines that serve these fifty odd factories, they can go greater distances from their places of business for one fare than they can go on the Halethorpe line for two, can't they? A. It's a question of where these factories may be. If they are quite at the end of No. 3 line it might not be so.

Q. Well, if they are anywhere within the city limits? A. That's possible by using a transfer going from one line to the other, sure.

Q. Then the fact is any one working at any of these factories could live at greater distance in the city and great distances in the counties, by using one of these other lines that serve them than they could by using the No. 3 line, couldn't they? A. That's possible.

Q. What advantage is that to you to have people use those other lines to ride greater distances when they could ride shorter distances? A. No particular advantage.

(Mr. Benson) That's all.

CROSS EXAMINATION

(Continued).

By Mr. Tingley:

Q. Mr. Emmons, have you before you Exhibit No. 26 rebuttal? A. Yes.

Q. Now taking your exhibit No. 26 I don't want to misquote you, but my recollection is that you said the exhibit indicated a comparable trend in Cleveland, St. Louis and Baltimore for the period covered by the Exhibit in revenue passengers. A. No, the ups and downs. Where one city goes up the other goes up and when one goes down the other goes down. That's what I meant. They rather superimpose on each other.

Q. The exhibit also shows doesn't it that the fare in Cleveland is six cents and the fare in St. Louis eight cents at the present time? A. Yes, but I gave you the facts that the Cleveland fare was now seven cents. This is only up to 1926, and the Cleveland fare is about to be changed to eight cents, according to my advice.

Q. The St. Louis fare was changed to eight cents in July this year? A. Eight—seven and a half, yes.

Q. Why do you think that Baltimore ought to be taken out of the fare class of Cleveland and St. Louis and put in the class Cicero, Ill? A. The Park Tax and other operating conditions we have makes us a different situation from these cities. Cicero, Ill., is part of another system.

Q. Do you think that Baltimore fits in with the group of cities having a straight ten-cent fare that you read yesterday? A. Certainly, with Boston.

Q. You think it fits in with the others? A. Well some of the others are smaller. I think it fits with Holyoke and Worcester. It's larger than those.

Q. It's larger than any of those except Boston? A. That's right.

Q. Most of these are cities of less than fifty thousand inhabitants? A. Excepting Worcester and Holyoke.

Q. I think you stated that increased fares are usually

put in when passengers are falling off? A. I did say that was the general reason for an increased fare.

Q. Weren't those periods usually characterized by industrial depression and unemployment? A. I do not think so. I think at the present time the depressions in business are due entirely to automobile rather than to unemployment.

Q. Then how would you account for the fact that they fluctuate up and down? A. These fluctuations up and down are seasonal fluctuations.

Q. If the automobile is responsible for the decline in revenue passengers, do you think that increase in fare that bring the street railway fare constantly closer to the cost of operating an automobile will remedy the situation or result in further loss? A. I have said many times I don't think it makes any material effect one way or the other.

Q. You think a one-cent transfer charge will have the result of some fall-off in passengers? A. I think we will have a decrease next year.

Q. Do you think there will be a decrease? A. Possibly, slight.

Q. How much more would there be on a 2½-cent increase in rates? A. I have assumed a total 5% decrease.

Q. Mr. Emmons, if the exhibits offered by People's Counsel based on data prepared by the American Electric Railway Association don't show the effect of fare changes on revenue passengers, what were they prepared to show? A. It doesn't show the effect as the People's Counsel submitted them. It shows the data given in bulletin No. 116, but it doesn't show the context of it.

Q. As a matter of fact, Mr. Emmons, wouldn't Bulletin No. 116 show very much more drastic results than are shown by that exhibit? A. No. It only shows one side of it. It doesn't show when they had a decrease in passengers they had an actual increase in reverse, which the companies must have in order to exist.

Q. Wasn't the title of that bulletin "Effect of Fare

Changes on Revenues and Riding Habit?" A. That may be. I have a later bulletin and I think that same title is carried over.

Q. If that were true would you think the American Electric Railway Association thought there was some relation between fare increases and riding? A. No, I don't think so.

Q. Do you think the title would be misleading? A. I think so, yes.

(The Chairman) You spoke a moment ago, Mr. Emmons, about your estimate of 5% increase in riding in case of an increase in fare?

(The Witness) Yes.

(The Chairman) You mean that 5% additional.

(The Witness) No. I said a 3% decrease normally, which I expect next year.

(The Chairman) As I understand it you have had a decrease in fares, we will say of 4% or 5%. I think you have said 5%, did you not?

(The Witness) In November the decrease in revenue is 5%.

(The Chairman) Then do you mean if you had an increase in fare that you would have a further decrease of 5%?

(The Witness) No. Oh, taking the year all the way through, I think the condition at the present time, Mr. Chairman, is that we are on quite a decline, and I am figuring that with our having a 5% loss now, under the same rate of fare, that any return condition will certainly not make us any better than 3% less next year, without any change of fare at all, because I think we are on the down grade. I am not attempting to project for 1929 and 1930. I do feel, however, that with no change at all we will probably have a further 3% loss next year. I am adding to that 3% loss next year and an addition 2% because of the change in fare.

Q. That's below 1927? A. Yes. It's about 3% total for the year, but we are running 5% now.

May I say this, Mr. Tingley? I do not know whether the association felt that they made a misleading heading to their bulletin No. 116, but this bulletin No. 163 has evidently changed that heading. It reads now: "Street Railway Fares in American Cities," shows cash rate, ticket rate, they supply reduced rates and transfer privileges, effective date and previous rate.

Q. That's a different bulletin? A. Yes.

Q. And it was gotten out for different purposes, wasn't it? A. No, it's the street railway fares of other cities. It gives the whole history of fares.

Q. Mr. Emmons, don't you know that Commissions have been taken judicial notice of the fact that increased fares above the limit of this company's present fares result in loss of passengers? A. That who have? I know New York and the small city of Syracuse rather intimated that there was a limit there, but that was different than in Baltimore.

Q. No, haven't they taken judicial notice of the fact that increased fare above the limit of this company's present fares result in loss of passengers? A. Revenue passengers?

Q. Yes, sir. I mean isn't that now a well recognized fact? A. No, I am not sure, but I think it's possible that you are right, that on a minimum carfare that you are carrying the same number of passengers every day, and you had an increase of fare tomorrow, the day after tomorrow you might have a slight decrease in passengers, but not enough in any way to offset your increase in revenue, and according to the Boston situation, even from an increase to the Boston situation, even from an increase from eight cents to ten cents, when they had a decrease of 6%, not all due to the increased rate of fare, the following year it came back, 6.3% back.

Q. When a downward trend has already set in and the fare is then increased, how can you tell how much of the subsequent decline in the trend is due to the fare and

how much would have occurred anyway? A. Just now I would say this. If we are going on a downward trend of 5%, and the fare increase were put in, and we would reach 6 or 7% we would all guess that the 1½ or 2% was due to the fare, but I know of no way of proving it.

Q. Would you apply that to a case where the downward trend has already started and an increased fare is put into effect and there is a further decline? A. I think you would have to deduct from that further decline the original decline before the fare was put into get some idea of what the fare itself did.

Q. Taking your exhibit No. 26A.

(Mr. Howard) Which town is that?

(Mr. Tingley) This is Twin City.

Q. (By Mr. Tingley) Will you project the high points at the end of 1923 and 1924 into 1926, Mr. Emmons? A. Yes.

Q. Doesn't that show a peak in December, 1925, under an increased fare considerably below the trend shown by that line? A. Yes, but it also shows a very marked downward trend for the years 1923 and 1924 and 1925 before the increased fare was put in.

Q. That's right. But following out your last thought. You would place the responsibility for the decrease in passengers after the fare increase upon the fare, wouldn't you? A. No, I would say that was put in on a downward trend; that even if you had no change of fare, you would still have a downward trend. I would say there might be some addition due to the increased fare, but that was all.

Q. It would accelerate it, wouldn't it? A. Not seriously. It might to some extent.

Q. Why do you think it wouldn't seriously accelerate it? A. I don't think this shows it seriously accelerated it.

Q. It's simply a guess one way or the other, isn't it? A. If you take the low parts of 1923, '24 and '25 and '26, you will notice almost a continuous drop.

Q. I was just going to ask you to do that. Will you also project the line from the low position for 1924 and '25 into 1926? A. If you draw a line connecting those you will find pretty near a regular trend drop.

Q. Doesn't that show the low point in 1926 was below the trend? A. No, I don't think so.

(Mr. Howard) The low point in 1925 was under too.

(The Witness) I think it shows simply a gradual decrease in passenger riders to my mind due to the use of some other vehicle which is the automobile.

Q. How can you arrive at any basis of apportionment between the amount of decline that would have occurred any way and the amount that would occur because of the increase in fare? It's a guess, isn't it? A. No, if you draw a line from the bottom of the valley in 1923 to bottom of the valley in 1926, it's pretty close to a general decline, if you will do that, and it looks to me like the fare had not much effect on it.

Q. Mr. Emmons, take your exhibit No. 26B. Doesn't that show a sharp upward trend in revenue passengers before the injunction against the jitneys was obtained? A. It shows an upward trend, just slightly, so it is the seasonal trend of the school months, September.

Q. Isn't it higher than any September had been prior to that under the jitney competition? A. That is so, yes.

Q. Mr. Emmons, doesn't this exhibit show that under a seven-cent fare there was an increase in revenue passengers, despite the imposition of a two-cent transfer charge? A. There is an increase in revenue passengers, but I think that's due entirely to the people coming back from the jitneys.

Q. Apparently the two-cent transfer charge didn't act as any deterent though, did it? A. It doesn't look like it here.

Q. Taking your exhibit No. 27, was the placing of the improved buses and improved equipment on the Charles Street line coincident with the establishment of the ten-

cent fare? A. I think we did put new buses on about that time. Double-deck buses.

Q. Put in at the same time, weren't they? A. I think we did, yes.

Q. For what purpose were they put on? A. We wanted to give a better service.

Q. You also wanted to induce increased riding, didn't you? A. We endeavored at that time with an increase to ten cents to give a seat to every rider on the bus.

Q. You also wanted to induce increased riding, didn't you? A. Yes.

Q. Do you think that would account for any increase in revenue passengers that occurred? A. That would account for some, but apparently the ten-cent fare didn't keep them off.

Q. Doesn't the Charles Street bus serve a class of people better able to pay the ten-cent fare than the average rider? A. I don't think so.

Q. You do not? A. They are a different class of people, but there are the same type of people in all sections of the city. Some sections may not be so well able to pay ten cents.

Q. The people on the Charles Street line, you think, would be typical of those you would find on the average car line in the city? A. I don't think there is any material difference, if you take any north, northeast or northwest section of the city. It might be so, when you get down east or south.

Q. Mr. Emmons, is a bus ride generaly considered by the public as worth more than a car ride? A. There seems to be an urge to ride on rubber. I don't know why.

Q. People are willing to pay more for it, aren't they? A. They seem to be.

Q. Don't you think that the furnishing of a seat has something to do with that? A. We are not doing that, unfortunately.

Q. You are in a great many more cases, aren't you? A. No, I think now in the rush hours we are about as crowded on the buses as we are on the street cars.

Q. Are you serious in that, Mr. Emmons? A. I am, unfortunately. I get as many complaints about people standing up in buses.

Q. Well the Commission doesn't. Take you exhibit No. 28, Mr. Emmons, now the car lines as shown on the exhibit show a drop in December, 1926, don't they? A. Yes.

Q. That was at the time when the rerouting was put into effect. A. That's right.

Q. Then in February of 1927 the line drops back to normal, doesn't it? A. It drops back considerably. February, of course, is a very short month, that's one reason why there is this drop in February, Mr. Tingley.

Q. Doesn't it look like the effect of the rerouting had disappeared in about a month? A. No, if you continue to March, it goes quite up again.

Q. Isn't that a seasonal change too? A. No, that is the effect of the 28 and 31 day month in there.

Q. How do you account for the fact that the apparent effect of the rerouting was of such short duration? A. It isn't if you will compare those months with the months of last year.

Q. The entire trend is upward, isn't it? A. The entire trend of 1926 was upward. The entire trend of 1927 is more or less level.

Q. The trend was upward before the rerouting was put into effect, wasn't it? A. Yes, slightly, but no jump like shown in December, 1926.

Q. And if that jump shown in December, 1926, were taken out and the line carried ahead, you would have a perfectly normal successive trend going upward, wouldn't you? A. No, because its a jump from 800,000 people, which is pretty nearly the maximum, up to December 1, 1926, up to pretty close to 900,000 people for every month, but February and March in 1927.

Q. Well in 1925 there had been a jump from 700,000 to more than 800,000? A. There is a slight increase there, yes.

Q. And in 1926 there was a jump from a little over 700,000 to 800,000?

(Mr. Howard) You are not comparing corresponding months.

(The Witness) Well, if you take the different months you wouldn't find any jump of 100,000 people from 1925 to 1926.

Q. I am taking the low point and the high point, Mr. Emmons. A. If you take the low point of 1925 its a little less than 700,000, and the low point of 1926 is but a little more than 700,000, so there is not much change, but if you take the low point of 1927 you will see almost 100,000 change in it.

Q. Isn't the inference to be drawn from that exhibit that's the break in adjustment that was caused by the rerouting in December was entirely readjusted in February or March of the following year? A. No, I woudn't draw that from that at all, because the very last month shown there, if you take the month of September, October is the last month shown, it shows about 890,000.

Q. But the line was going up just that way before the rerouting? A. No, if you take September of last year you will see 800,000.

Q. It was a steady upward trend, wasn't it? A. It was a steady upward trend, but nothing like a jump of 90,000.

Q. Don't you think that some other cause than rerouting must be found for the increase in revenue passengers in 1927? A. On the car line or the bus line?

Q. On the car line. A. No, I think entirely the rerouting did that.

Q. How about the bus line? A. On the bus line I think the rerouting did that.

Q. You think it was responsible for that in its entirety? A. Yes.

Q. Take Exhibit No. 29, Mr. Emmons. Isn't the principal significance of this exhibit that it shows that on the basis of cost of living in Baltimore as estimated by the company a ten-cent fare is not warranted? A. No, I woudn't say that.

Q. It does show that, doesn't it? A. No, I think it shows to the contrary; that the people generally are more able to pay a ten-cent fare today than they were before.

Q. Is that on the basis of the cost of living curve, Mr. Emmons? A. No, cost of wage curve.

Q. I only ask you about the cost of living curve. A. That's only a part of the story.

Q. Its that part of the story I asked you about?

(Mr. Howard) And what is the question?

(Mr. Tingley) Whether the exhibit didn't show, on the United States Bureau of Labor cost of living curve in Baltimore, that a ten-cent fare was not the value of the service in Baltimore today.

(Mr. Howard) Don't you think that's a question that is making the other party assume your side of the case?

(Mr. Tingley) That's what I want him to do, and I don't think there is anything unfair about it.

(Mr. Howard) I don't think you have a right to ask him to assume that you are right.

(Mr. Tingley) I have a perfect right to ask him hypothetical question.

(The Witness) It certainly shows the 7½-cent fare wasn't right.

Q. On the basis of the estimate chosen by you? A. On the basis of the valuation, but as I say the cost of living curve isn't the story by any means. On the cost of wage curve it certainly justifies a ten-cent fare and on the union labor curve it justifies it.

Q. Suppose you took it on the basis of 1919, on a six-cent fare, how would that effect the result? A. It would effect it considerably, but the fact that a six-cent fare was given in 1919 isn't proof to my mind at all that it was a proper fare.

Q. The Commission stated at that time that it would not bolster up credit at rates that were unfair to the public, didn't they? A. They may have made such a statement as that.

Q. And they stated that the value of the service at that time, in their opinion was six cents? A. You have read something like that, but Dr. Hollander said this morning the Commission may have been wrong.

Q. I say this will all respect, I don't think Dr. Hollander understood the legal principle involved. I think he thought that what value of service meant was that that was not the maximum limit of service value which which is the sense in which it is used in the Law, but would be the value of the car ride if there were no such legal principle to operate, which might or might not be a totally different thing. A. I certainly disagree with any idea that six cents in 1919, with the costs that were then existent and the wages received by people, was the value of the service.

Q. Why was it that the Company only asked for a part of their increased cost of operation at that time? A. They hoped they would get thru, but in Mr. Zimmerman's testimony he really asked for a ten-cent fare.

Q. I know he did, but he didn't get it. A. He should have had it.

Q. Regardless of that the value of the service was fixed by the Commission at that time at six cents, wasn't it? A. Zimmerman's case was the six and a half cent case.

Q. I am talking about the first case. A. That was simply approving a rate that had been put in prior to that time.

Q. And the Commission said that the value of the service was six cents. If that basis were used in 1919

instead of 1913 you would get a very different result, wouldn't you? A. If that base were used you would, but I think the base is wrong.

Q. We think this one is. It's just a difference of opinion.

Q. Mr. Emmons, will you take your exhibit No. 30? The gasoline sales that are shown by the exhibit include gasoline sold for commercial vehicles as well as for vehicles that would compete directly with the United, don't they, passenger-carrying vehicles? A. That's the entire gasoline sales.

Q. There has been a large increase in that type of vehicles during the last few years? A. I don't know that the ratio has been any larger than the other. I am not ready to answer that.

Q. I don't believe you gave the Maryland and Pennsylvania and B. & O. R. R. report exhibit numbers, but I want to refer those for a moment? A. Yes.

Q. To what extent have fares been increased to offset the loss of passenger revenue caused by automobiles in the case of the M. & P. and B. & O.? A. I think they have depended on the freight rates which have been increased.

Q. In 1926, didn't the total operating revenues of the M. & P. as shown by page four of this report fall off .57%? A. .57%, yes.

Q. And operating expenses were cut 2.71%? A. Yes.

Q. Now in the same year, Mr. Emmons, 1926, your revenue decreased 4.2%, didn't it? A. I think that's right.

Q. And your expenses increased .65? A. We had an increased wage in that time.

Q. Taking your exhibit No. 31, doesn't that show a progressive decline in the cost of money to the Company and in the market yield of securities, from 1920 to 1927? A. Not in the cost of money to the Company.

Q. It goes from 9% to 7%, doesn't it? A. The cost of money to the Company was 7.32 as against the previous 6.93.

Q. But the first was 9 and 3/8's%? A. Yes, those were war period issues which have been retired, because we were able to get a lower rate of interest.

Q. Now let's follow them down and see if there is a progressive decline. The first one is 9 and 3/8's%? A. That's right, retired it.

Q. The second is 8.70%? A. That's right retired.

Q. The third is 6.75? A. Yes.

Q. The next 6.60%? A. Yes.

Q. The next goes up to 7.27? A. Yes.

Q. The next goes down again to 6.93? A. Yes, but that's still higher than the one second head and the one third head.

Q. And the last one is 7.32? A. Yes.

Q. Now let's take the market yield. The first is 8%? A. Yes.

Q. The next is seven and three-quarters? A. Yes.

Q. The next is six and a quarter? A. Yes.

Q. The next is 6.45? A. Yes.

Q. The next is 6.50? A. Yes.

Q. The last is 6.28? A. Yes.

Q. It's lower? A. But it isn't a question of market yield, it's a question of cost of money to the Company, and the last one is higher since 1922.

Q. This is not my exhibit, I didn't put the market yield on it? A. We have just told the whole story here.

Q. Why is the market yield there? A. Simply because we gave the whole figure. The market price and every thing.

Q. It does show a progressive rate of decline in both items since the past war period? A. Well, if you take those two which are really the reflects of the war period in 1920 and '21, it shows a decline there, but following

that, since 1922, there is no decline in the cost of money to the Company.

(The Chairman) Mr. Emmons, wouldn't the fact that the issues of January 1, 1924, which consisted of four million dolars of bonds, running for a long term of years, have a tendency to enable you to get that money at a lower rate than your short term notes amounting to only two and a half million dollars?

(The Witness) Yes, I think that's true, but that's about 7%, and certainly you have got to have something over the mere cost of money in order to have any credit.

Q. Mr. Emmons, taking the exhibit headed "Passenger receipts, actual day by day comparisons," I think that's No. 32, isn't it, for November, 1927 ? A. Yes.

Q. November was one of the highest months of last year, wasn't it in passengers, Mr. Emmons? A. I think that is true, yes.

Q. And it was the second highest in your experience for revenue, wasn't it? A. Mr. Swaine says it is a fact.

Q. Mr. Emmons, if no fare increase is granted by the Commission in this case, would the Company undertake a voluntary reorganization?

(Mr Howard) What is the object of that question?

(Mr. Tingley) The object is to get an answer.

(The Witness) I couldn't say about that myself, I have got a Board of Directors.

(Mr. Markell) Reorganization of what?

(Mr. Tingley) Of the securities.

(Mr. Markell) How?

(Mr. Tingley) Of the financial structure?

(Mr. Markell) Voluntary on whose part?

(Mr. Tingley) On the part of the Company.

(Mr. Markell) What's the Company have to do with it?

(Mr. Tingley) I am asking Mr. Emmons the question.

(The Witness) I can't see how you can conceive that we have no relief under the circumstances.

Q. Assuming that you don't? A. That is an assumption beyond belief.

Q. Will you make the assumption? A. I can hardly make such an assumption, but assuming that it does, assuming on a wonderful hypothesis on the assumption, that would be a question beyond me. It would have to be taken up with the Board.

Q. Mr. Emmons, do you think that a one-cent transfer charge would be a burden to the riding public? A. I don't think it would work out well, and it certainly wouldn't give us sufficient relief.

Q. Do you think it would be burdensome to the riding public? A. I think it would be objectionable to the riding public.

Q. Does that mean a burden as you are putting it or not? A. I don't think a cent is a burden to any person.

Q. Do you think that short haul riders would fall off under such a charge? A. Some people who take a transfer now and use it if a car is right there and walk if the car isn't there, it would certainly fall off.

Q. What extent of decline would you anticipate from that source? A. I say that I think this 20% given by Mr. Nodder is very problematical. I haven't any idea. I think it will be more. Mr. Wolf gives in his analysis about 50% of short haul people, and if it were 50% short haul people it would be somewhere between the twenty and fifty.

Q. Why do you think that more than 20% of the users of transfers would fall off under a one-cent transfer charge when only an additional 2% would fall off under a two and a half cent fare increase? A. It isn't that. It's just question of charging anything for a transfer, because as I have just remarked, when a person comes to a transfer point he gets a transfer whether he is going to use it or not. If the car is right there, he will use it. If

there is a charge for it, he will not take it, and if Mr. Wolf is right in his analysis of the long and short haul transfers of about 50%, I think nine out of twenty, then I would expect more than 20% to fall off.

Q. Assuming all of the testimony offered by the Company to be correct, the Company would not earn, under your estimate, an 8% return in 1928 under the ten-cent fare, would it? A. Not with the depreciation we have. We figure about 7.44, I think.

Q. And you and all of your witnesses have testified that you believe the Company is entitled to an eight per cent return? A. Eight percent return.

Q. If you get a ten-cent fare when will you go after the eight per cent return? A. We hope business will come back so that we will reach it.

Q. Suppose it doesn't? A. We will have to suffer along to see if it will.

Q. You will suffer along and not go after the eight per cent return? A. Not for the moment. We will see how things come out.

Q. And if the Commission gives you ten cents, how soon will you go after an eight per cent return? A.We woudn't do it the next day.

Q. The day after? A. Not quite so soon.

Q. You know that the rules of the Commission require that retirement be made at original cost, don't you? A. That has been the direction of the Commission in reference to writing off depreciation accounts, but Mr. Tingley, I cannot see how that can be held true, following a valuation because, as I said in my direct testimony at first, if you take a piece of property whose original cost is $50,000, the valuation cost given to it is $100,000 and you carry out the original rule of the Commission that $50,000 is only chargeable to depreciation account, and the other $50,000 has to be capitalized, it merely puts on that $100,000 another $50,000, giving a book value to that piece of property of $150,000, whereas if tomorrow you have another valuation made it would only be $100,000.

It's a condition I can't conceive of as being allowed to continue.

Q. Now in the case of the Mt. Washington bridge you give the reverse english of that, don't you? A. No, I don't see how I do. The Mt. Washington bridge has been used and used up, and because of Legislative action we have been compelled to abandon it.

Q. If you had been able to charge that bridge off on the basis of its valuation cost, and then when you took the bridge out you didn't have to replace it you would be ahead of the game, wouldn't you?

(Mr. Markell) Why certainly not.

(The Witness) I don't see how we would, because the value is included in for $86,000 in the valuation. We would certainly be back of the game, if we weren't allowed to write it off.

Q. Your Company didn't have to replace it? A. No, but it cost us $46,000 to put tracks on the new bridge.

Q. Mr. Emmons, I think you pointed out yourself that the yield to the investor has no significance in connection with the cost of money to the Company? A. Well, it goes together, but it's the cost of money to the Company that we have to cover.

Q. It's the cost of money to the Company that effects the rate of return, isn't it? A. Yes.

(Mr. Tingley) That's all.

CROSS-EXAMINATION (Continued.)

By Mr. Clark:

Q. Mr. Emmons, I think you pointed out 31 cities and towns, having a flat ten-cent fare? A. I did.

Q. Those cities and towns, I think you said, are in five states? A. That was the way I read them, I think or six. Six of them.

Q. Illinois, Maine, Massachusetts— A. New Jersey, New York and Pennsylvania.

Q. Which are the New York? A. Lackawanna.

Q. Then about half of these cities and towns are in the single state of Massachusetts? A. Just about half, 15.

Q. Half of them are in one state. Now the Illinois towns are all suburbs of Chicago and are served by the elevated? A. I do not think they are all served by the elevated. They are suburban towns of Chicago, however.

Q. Berwyn, Cicero, Forest Park, Maywood, Oak Park. A. They are all suburban towns of Chicago.

Q. And they are reached by the elevated? A. Reached by the elevated, but I think they are served by another railroad.

Q. But you spoke of the elevated when you spoke of a flat ten-cent fare? A. I am speaking of these cities that have a flat ten-cent fare, not the elevated.

Q. Didn't you testify when you were last on this subject that these towns were served by the elevated, and that you were here giving the elevated fare? A. I think I did say that I thought they were served by the elevated. Mr. Swaine has corrected me; that they are reached by the elevated but served by another Company—Chicago and West Town Company.

Q. Where did you get these figures? A. These figures came from the American Electric Association.

Q. Now the bulletin from which you take these figures, does it specifically say the ten-cent fares referred to are all surface fares? A. Mr. Swaine says it shows Chicago and West Town Railway, we are looking it up.

Q. Because I think the surface fares in those towns are the same as Chicago? A. Chicago and West Town Railway Company is the name of the Company operating it. Now that may be a subsidiary Company of the elevated, I do not know.

Q. Operating in all these towns? A. This is Oak Park, we will look at the rest of them.

(The Chairman) What is Cicero?

(The Witness) Cicero is Chicago and West Town. Forest Park is Chicago and West Town.

Q. It's just like Highlandtown is to Baltimore? A. Very closely connected. Outside of the city tho. The Chicago is given as the Chicago Rapid Transit Company, so it is a different Company. As I say it may be a subsidiary, I am not sure.

Q. I think I have ridden on the line in two of those towns, and the fare as I recall it is the same as Chicago. The elevated runs to them and on the elevated line it charges ten cents. A Yes.

Q. Now, Mr. Emmons, in only one of these cities, which is Boston, do the figures run into six, that is beyond 100,000? A. No, I think we gave you——

Q. One other town, Worcester, Mass., 193,000? A. Yes, that's right.

Q. The others are all in five figures? A. That's right.

Q. In these small towns, Mr. Emmons, the proportion of riders to the population is a great deal smaller than in large cities, isn't that true?

A. It's likely to be true on account of being small distances. There is more likelihood of walking.

Q. And there is more competition? A. Simply a walking competition, I would say.

Q. That's a very effective method of competition, isn't it? A. Often so, yes.

Q. I am afraid you will find it so if you get what you are asking for? A. No, people won't walk for two and a half cents.

Q. They walked for a cent?

(Mr. Markell) I walk for nothing.

Q. So that Mr. Emmons then, practically this ten-cent charge, which is in this small number of small towns compared with all the cities and towns in the United States

is practically a break town or a stand-by charge, isn't it? A. No, it's a charge that's supposed to cover the cost of service. I want to call your attention, as I said before, that we are not proposing a ten-cent fare as they are because we are still proposing a five-cent school ticket, a five-cent half fare, a commutation rate that is less than ten cents.

Q. Yes, I know, but I am speaking now of the city fare. A. I would not call it a breakdown charge, no.

Q. In these small towns, where the people can walk usually, and jump on the cars when they are in a hurry to get where they are going, you wouldn't call that a service different than the service in Baltimore? A. They are all trying to serve the people as best they can, and trying to have cars enough to take care of the people. It may be that some lines in these small towns are just as heavily patronized as on our lines. It's simply an extension of the number of lines.

Q. You would not point to these few small towns in the whole United States, found only, outside of Illinois, in only five states, as any sort of a criterion as to what the fare should be in Baltimore City? A. That isn't what makes the fare, it's the question of cost and the question of need of the Company.

Q. Just answer that question. A. No, I don't think controlling proof at all, but I am trying to show that it isn't an unusual thing for a ten cent fare city.

Q. It hasn't any important bearing on what the fare should be in Baltimore city? A. No, but the total cities that have a ten cent fare is 219.

Q. But that's a basic fare? A. Basis fare.

(Mr. Tingley) And many of them have tokens equal to or less than the fare in Baltimore.

(The Witness) Some of them have, very few.

Q. Some of these basic ten cent fare cities have even seven cent token fares, haven't they? A. They have all kinds of grades of fares and some of them have a nine cent token fare.

Q. What do you think is necessary in order to determine whether you can't get an increased revenue without jumping the fare? A. I am quite convinced, Mr. Clark, that any reduction of rate, even thru any form of ticket reduction of weekly pass reduction or anything like that will not give us the revenue that we need.

Q. Isn't it contrary to all present tendencies to refuse to recognize any difference between the casual or the constant rider or the necessitous and the casual rider? A. No, because all our riders are more or less constant riders. We have very few of these luxury riders nowadays. We used to have them before the days of the automobile.

Q. Do you think it's a just charge made irrespective of how often a person rides and how far he rides in the city? A. Yes, I think it's a just charge to be made to cover the cost of service.

Q. Why is it then that in only these two small towns that you find a flat fare? A. As I say I think there are going to be many more of them in a very short time. There is bound to be a time of a beginning. I recently saw a chart of the different rates of fare, starting with the five cents. The five cents gradually came down to a very dim point. The seven cents has grown, the eight cents has done the same. The ten cents which started from nothing and now has grown to be more of a—ten cent basis—portion of the whole rate of fare than any other kind.

Q. Haven't you, or I think Mr. Markell or some one on that side, haven't you referred to the fact that the people of Baltimore are now practically using the street cars as a standby service?

(Mr. Tingley) Break down service. Mr. Markell, in his opening statement.

(The Witness) To the automobile man it is a break down service, but 80% of the people of the city are riding street cars.

Q. Would you say now as President of the Company that people are using the United as a break down? A.

I do not think to 80% of the people who are using the United it is entirely a break down service. To a lot of people it is a break down service.

(Mr. Tingley) Didn't you say 75% at one time?

(The Witness) Between 75 and 80.

Some portions of the day it's 80%.

(Mr. Tingley) And the rush hour passengers are falling off three per cent. a year?

(The Witness) No, the rush hour isn't falling off at the rate of 3% a year.

(Mr. Tingley) But the passengers are.

(The Witness) The great question is that the peak of our service is still going up while the rest of it is falling off.

Q. Isn't it a fact that these 219 cities, including all the large cities of the country, have a basic ten cent fare and then a lower token fare——

(The Chairman) But they don't.

(The Witness) Some 30 of them have not.

(The Chairman) All of the large cities of the country, don't have a basic ten cent fare.

(Mr. Clark) I am speaking of these 219 including most all of the large cities in the United States.

(Mr. Tingley) But it doesn't. Most of the large cities have low fares.

Q. Isn't it true that these 219 cities having a basis fare of ten cents, and a lower token fare, find it fair and profitable to have a token fare in connection with the higher basic fare? A. No, I think they are trying it out to see if they can work thru with that. A good many of them have three tokens for 25c. Some have 11 tokens for a dollar.

(Mr. Tingley) Two for fifteen cents.

(The Witness) I don't see any.

(Mr. Tingley) There are some.

(The Witness) I think in the 219 there may be some, two for fifteen, but they are very few.

Q. What situation is there in Baltimore City which makes it just and reasonable to the public to impose upon them a fare of this kind, as you propose that does not exist in comparable cities? A. Well a great many things exist. I think we have a very difficult operating condition. Narrow streets, and a hilly town. We have the Park Tax that takes a great amount of our money and our situation is such that it's a necessity to have an increased income.

Q. You have a number of times referred to that Park Tax. Including the Park Tax your operating ratio is less than any other large city in the country? A. I think it is.

Q. That's no hardship. A. It isn't any criticism of us, I am sure.

(Mr. Clark) That's all.

(Mr. Tingley) Does that conclude your Rebuttal.

(Mr. Howard) Yes.

RE-CROSS-EXAMINATION.

By Mr. Benson:

Q. Mr. Emmons, these ten cent fares in these towns around Chicago, are they limited to those particular towns or do they carry them into Chicago? A. I think they are on a different line. They are limited to the towns. But if it should be part of the Chicago Elevated, serving them and there are some, I think, I think it carries them into the city. I would have to look that up specifiically for you.

Q. Will you do that for me. A. Yes.

Q. I think I asked you the other day that the city limits in Boston is not the boundary at all for the ten cent fare? A. No, the real city limits of Boston are very restricted.

Q. But it goes much further than five and three-eighths miles? A. Not the real city limits.

Q. But I mean the zone carfare? A. Some places it does. I looked that up and I found that the carfare goes out as far as Watertown, and some other towns that are out quite a distance, but for instance, you go out thru Brookline, you go thru a good many of the adjoining cities and still do not go as far as our city limits.

Q. I am asking about five and three-eighths miles, from the center of the city? A. I think there are some lines that go much further than that.

Q. Do you know of any that go as little as five and three-eighths miles from the city, the center of the city and pay two car fares? A. Not on the Boston elevated, but I know there are places out towards Newton where you have to go from one line to another.

Q. But the first fare from the center of the city is more than five and three-eighths miles from the center of the city in Boston? A. No, in the direction I am speaking of, out to Newton, the city limits is only about three and a half miles from the center of the city, but then there is another company, and you have to pay an additional fare in the Newton District, but there are certain directions in Boston, you can go into these adjoining towns, what is known as Metropolitan Boston which would be more than that distance.

Q. Under a similar arrangement Halethorpe would be in Metropolitan Baltimore? A. If there was a Metropolitan Baltimore.

Examination Concluded.

PEOPLE'S COUNSEL REBUTTAL.

Thereupon—

H. CARL WOLF,

a witness of lawful age, produced on behalf of the Public Service Commission of Maryland, having heretofore been duly sworn, according to law, resumed the stand in Rebuttal, was examined and testified as follows:

DIRECT EXAMINATION.

By Mr. Tingley:

Q. Mr. Wolf, have you prepared an exhibit entitled "Results of operation under Sunday Pass in Cincinnati, Ohio"? A. I have.

Q. Have you also prepared as an exhibit a copy of an exchange of telegrams which was used as the basis of that exhibit? A. I have.

(Mr. Tingley) I ask that those be introduced in evidence, the first to be marked People's Counsel Ex. No. 53 Rebuttal, and the second to be marked People's Counsel Ex. No. 54, Rebuttal.

NOTE: Papers above referred to are here filed in evidence and marked People's Counsel Exhibit No. 53, Rebuttal; and People's Counsel Exhibit No. 54, Rebuttal.

Q. Will you explain those exhibits, Mr. Wolf? A. I think they probably speak for themselves. No. 54 shows first the telegram that was sent to Mr. Edgar Dow Gilman, director of Public Utilities in Cincinnati, Ohio, asking for information concerning the working of the Sunday pass in that city.

The second part of that sheet shows Mr. Gilman's reply.

Q. Suppose you read those two. A. The telegram to Mr. Gilman dated November 28th, is as follows:

NOTE: Said telegram here read.

Mr. Gilman wired me on November 28th, as follows:

NOTE: Said telegram here read.

Those details to which he refers have not as yet been received.

Exhibit No. 53 shows a tabulation of these figures and a comparison of revenue passengers in 1926 and '27, on the 268 week days and the 45 Sundays, showing that the average number of revenue passengers per week day increased from 256,860 to 266,550 and that the average revenue passenger for 45 Sundays increased from 163,900 to 197,700. I might say that the percentage of increase on week days, was 3.75; and the percentage of increase on Sundays was 20.1.

(Commissioner Harper) The number of passes sold on Sundays, does that mean the average number?

(The Witness) Yes sir, for any one Sunday.

(Mr. Markell) They just say about 12,000. They evidently don't know, and the about five and a quarter cents.

(Commissioner Harper) I understood they had their conductors keep a check on the number of passes used by the riders.

(Mr. Markell) But this doesn't show it?

(The Chairman) This simply shows the number of passengers carried on Sunday. It doesn't show the revenue on Sunday?

(The Witness) No sir, without the revenue.

Q. Mr. Wolf, that shows that passengers have been increasing even on week days in 1927 over 1926? A. It does to the extent of about three and three-quarter per cent.

Q. It shows that they have been increasing on Sunday at a much more radical rate of progression? A. Yes, something over twenty per cent.

Q. Have you any further comment to make on those exhibits, Mr. Wolf? A. I suppose that the Commission noted that the Sunday pass was put in effect on Novem-

ber 1926 and that therefore all the figures for 1927, for Sundays, were the result with the Sunday pass effective.

Q. Mr. Wolf did you see the one-third of a series of articles that Mr. Waltman that were published in the Baltimore Sun? I think the last third was published last Sunday? A. Yes, I did.

Q. Did you know that Mr. Waltman quoted the Vice-President of the Company that the increase in revenue passenger was largely attributable to the Sunday pass? A. I think that was the remark in that article, yes.

Q. Mr. Wolf, do you recall that Mr. Emmons testified that he did not think that a decrease in the use of a utility service under higher rates would indicate burdensomeness of the rates? Have you any comment to make on that statement? A. I think that's been covered pretty well today and that particular statement refuted in Dr. Hollander's testimony when he spoke about the marginal riders.

I just have this one comment to make of that, also, that it seems to me only natural that some decrease in riding would result of an increased fare and vice versa, no matter what the change nor at what point it took place when one considers the family budget side of the story.

It's pretty well established that the average family or average utility customer spend about the same amount of money irrespective of the cost of the service, particularly as applied to gas and electric utilities.

Q. How is that shown, Mr. Wolf? A. The average gas customer in this state spends from 30 to 45 dollars depending somewhat on the locality, per year for his service, and the average electric customer slightly more. The average family using a street railway spend something like twice this amount. It's also shown pretty well that the amount of money appropriated by any one family for this class of utility service stays pretty well the same. It's an unconscious attempt to keep within that budget, hence when the price of the unit goes up, the number of units used goes down.

Q. What data have you in support of that statement,

Mr. Wolf? A. I haven't any figures here, but I think a study of any utilities service, gas or electric will bear that out.

Q. Is that shown in the annual report, or how did that come to your attention? A. That could be shown from the annual reports, yes.

Q. And you have had an investigation of that matter and that is your conclusion from it? A. Yes.

That's a fact you consider almost every day in adjusting gas and electric rates.

Q. Mr. Wolf, what comment have you to make on Mr. Emmon's criticism of People's Counsel Ex. No. 36? I think first of all he criticized the use of the year 1922 as compared with 1927? A. Well, the year 1922 was selected, as I said in my testimony in Chief, simply because of the close analogy between the amounts of the operating revenues in 1922 and 1927 as estimated. Just to recall one statement he made as to the $1,200,000 which I show at the bottom of that sheet in economies claimed by the Company since 1922 that that erroneously contained or included some taxes, I might say that it did erroneously include some taxes to the extent of four thousand dollars out of $1,200,000.00.

Q. That was the extent of the erroneous inclusion of taxes? A. That's right.

Q. Were you harboring any dark designs against the integrity of the Company when you prepared that exhibit? A. No.

Q. Have you prepared an exhibit entitled "Value of Service in 1927, compared to value found by Commission in January 1919"? A. I have.

(Mr. Tingley) I ask that be introduced in evidence and be marked People's Counsel Ex. No. 55, Rebuttal.

NOTE: Statement above referred to is here filed in evidence and marked People's Counsel Exhibit No. 55, Rebuttal.

Q. Mr. Wolf, this Exhibit No. 55 was prepared as a

modification of Company, exhibit No. 29, wasn't it? A. That's right.

Q. Will you explain the exhibit to the Commission? A. This exhibit is based on the statement of the Commission read by Mr. Tingley this morning in Case No. 1583, found on page 58 of the 1919 Annual Report of the Commission, to the effect that the Commission had concluded that under existing conditions six cents as the basic rate for adults was the fair worth of reasonable adequate street railway service to the community served by the Respondent.

Assuming that six cents was the worth of the service in January 1919, I attempted to draw from that, on the factors presented in the Company's Ex. No. 29, the worth of the service at the present time.

Platform wages, for example in January 1919 were 45c as against 53 now, so that if the index were taken as one hundred at that time, the present index would be one hundred and eighteen as shown at the top of the page.

Operating expenses, per car mile, average for 1918 and 1919 were 23.3 cents, whereas the average for the first ten months of 1927, is 28.6 cents, giving a present index of one hundred and twenty-three.

The cost of living in Baltimore as shown by the United States Bureau of Labor Statistics was approximately one hundred and eighty for in January, 1919, and one hundred and seventy-seven now, showing a decline and a present index figure of 96.

The all commodities wholesales index showed a similar decline to a present index of seventy-five, as compared with 1919.

The average of these four factors shows an index from one hundred to one hundred and three. Applying these various indices to the six cent rate, used by the Commission, as representing the value of service would give a present value of service, based on platform wages of 7.1 cents, on operating expenses per car mile of 7.4 cents, on the cost of living in Baltimore 5.8 cents, and on the

all commodities wholesale index, of 4.5 cents, the average of the four factors above would be 6.2 cents.

Q. If the Commission was correct in 1919 as to the value of service at that time being six cents, on four out of the five bases used by the Company in its exhibit No. 29, no increase in fare would be justified, is that correct? A. That's right.

Q. Why was the union labor index not used in the exhibit, Mr. Wolf? A. Because the Union Labor index is not in any way an index for Baltimore.

Q. Now in any way an index of what? A. Labor rates.

Q. And of the paying ability of the average person using the street cars? A. I think not.

(Mr. Tingley) The Witness is with you Mr. Howard.

(Mr. Howard) We have no questions.

(Mr. Tingley) That's our case if the Commision please.

(The Chairman) Mr. Clark, have you any questions?

(Mr. Clark) No sir.

(The Chairman) Mr. Toole, have you any questions.

(Mr. Toole) I have none.

(The Chairman) Senator Benson, have you any questions?

(Mr. Benson) No sir.

(The Chairman) We will then adjourn this hearing until December 8th, when we will hear argument and receive the briefs of Counsel.

Examination Concluded.

NOTE: At 5.00 o'clock P. M. the Commission then adjourned until Thursday, December 8th, 1927 A. M. for the purpose of hearing argument.

EVIDENCE FROM RECORDS IN FORMER CASES BEFORE PUBLIC SERVICE COMMISSION OFFERED IN EVIDENCE IN THIS CASE.

A.

TESTIMONY OF ALLEN G. HOYT IN THE GAS COMPANY RATE CASE, 1926, No. 1915—16TH DAY, APRIL 19, 1926.

(Mr. Miles) If the Commission please, I would like the appearance of Mr. Thomas J. Tingley, the People's Counsel, appear in the record in the case.

Thereupon—

ALLEN G. HOYT,

a witness of lawful age, produced on behalf of the Consolidated Gas Elec. Light & Power Company of Baltimore, having first been duly sworn, according to law, was called to the stand in rebuttal, was examined and testified as follows:

DIRECT EXAMINATION.

By Mr. Markell:

Q. Mr. Hoyt, where do you live? A. New York City.

Q. And what is your business? A. I am Vice-President of the National City Company.

Q. And what is the business of the National City Company? A. The National City Company is an investment banking institution which deal in securities.

Q. And does it deal in public utility securities? A. It deals in public utility securities among others.

Q. Can you give the Commission some idea of the value of the investment business that the National City Company does in a year? A. The National City Company either alone or in participation with others shares in a very substantial portion of the major senior public utility

financing in the U. S. The volume aggregates several hundred millions per annum.

Q. Several hundred million of utility financing alone? A. Either alone or with associates.

Q. Of utility financing? A. Yes.

Q. And have you any idea of what other general financing you do, outside of that? A. Well it's a very large amount, even larger than the other class of financing which we undertake.

Q. How long have you been vice-president of the National City Company? A. I have been with the National City Company since 1916.

Q. And what was your business before 1916? A. I was an officer and director of N. W. Halfey & Company, Inc., which was an investment banking house which specialized in public utilities. N. W. Halfey & Company not only financed public utilities, but it controlled certain public utilities. It selected the management and in that connection I was a director of some of the public utilities which N. W. Halfey & Company controlled.

Q. How long were you a director and officer of N. W. Halfey & Company? A. From 1907 until 1916.

Q. And how long then have you been personally in the business that has been directly related to public utilities and the securities of public utilities? A. Well in the neighborhood of 20 years.

Q. Are you familiar in a general with the Consolidated Gas Elec. Light and Power Company of Baltimore? A. In a general way, I am.

Q. I suppose you have seen its annual reports and are in a general way familiar with its financial statements? A. I am.

Q. Its capitalization? A. And its activities.

Q. Will you tell the Commission whether, speaking of utilities generally, and speaking especially of such a utility as this Company, the market for stocks and bonds and the avenues and channels of financing are broadly

speaking, local or general; I mean by general country wide? A. The larger issues in financing we usually have a syndicate in which dealers all over the U. S. and sometimes abroad participate, where it's necessary to raise large amounts of capital the market is national rather than local.

Q. This Company would be no exception to that statement? A. I don't think it would.

Q. Do you know whether this Company's securities have been marketed nationally or locally? A. I know that the houses handling the bonds of this company have offices in many of the financial centers of the United States.

Q. From your experience with public utilities and with the securities of public utilities, do you or do you not feel in a position to express an opinion as to what rate of return would be required and expected by investors in order to induce them to invest in such a utility as this Company? A. I think by experience justified me in having an opinion based on that experience regardless of the rate.

Q. If investors were going to buy or build a property like that of this Company, what amount would they feel, in your opinion, that the property should earn, in order to induce them to invest their money in the purchase or construction of such a company? A. I think the expectation in order to enlist the necessary capital would have to be at least 8%.

Q. Taking into consideration other classes of investment, with the comparative risks and return their own, the rate of return generally required to secure proper credit for borrowing money and financing its operations, what should such a company as this Company be permitted to earn in order that it might compete successfully with other business and be on a parity with them, in your opinion?

NOTE: Question here reread by Stenographer.

A. I think the return should be 8% in order to permit it to compete with other lines of industry for capital.

Q. The question you have just answered was put without reference to particular localities. You are familiar of course with local conditions in New York? A. I am.

Q. So far as you are aware are any higher returns necsary in New York than in Baltimore on investments generally? A. I don't think they are. You take the major cities, your stronger companies in the major cities, stronger public utility companies in the major cities, can finance on about the same basis, and to attract the necessary capital to enable these various companies properly to function, I think the return in the larger cities for the better companies woud be very similar. The reservoirs after all are national and not local.

Q. The last question that was asked and answered by you, involving consideration of other classes of investment without reference to localities, would be answered in the same way so far as New York is concerned A. It would.

Q. And you have already said, so far as you know there is no reason why any lower return would be adequate than in New York? A. No.

Q. New York of course is the financial center of the world? A. That's where the largest amount of securities are of course in the first instance underwritten.

Q. What in your opinion would be the lowest rate of return that such a Company as this should be permitted to earn on the value of its property in order to make that return equal to that generally being made at the same time, and in the same general part of the country, on investment in other business, undertakings which are attendant by corresponding risks and uncertainties. A. I think the rate would have to be 8%.

Q. Will you tell the Commission in your own way what you consider to be the outstanding elements of risk and the advantages and disadvantages in a utility business that leads you to the conclusion that at least 8% would be necessary to attract capital to such a business? A. Well, I think in the electric business there has been a change in the situation in the last twenty odd years. The electric companies now sell a very large part

of their current to industries. Years ago electric companies were light companies, and in periods of depression people had to have electric lights, the earnings were very stable then, but now I believe in a period of depression the electric companies would suffer materially if the steel companies and the automobile companies and other large users of power cut down on their requirements.

Now a public utility is never guaranteed a return, its only permitted to earn a return if it is there, and I say that when an electric company in the country is very prosperous, and when the industries are using a maximum amount of power, if the electric Companies are not permitted, under such conditions, to earn more than 8%, they are running risks of earning very much less than 8, in a period of depression, because certainly under such conditions the Commission couldn't be expected to say well, business is very bad now, and this company is not earning 8%, they are not selling much power for industrial uses, therefore we will boost the rates for electric light where the people have got to have it under a period of that kind, so I say that there is a hazard in the electric light and power business that is inherent to the business, and yet is not evident on the figures.

For the last ten or more years the history of the electric light and power companies has been very satisfactory, but electric light and power companies have been very able, I think, in finding methods of selling their current. One of the reasons that we attribute to industrial supremacy of the United States, as compared to Europe and other countries is the fact that behind each worker is a very large amount of power, its being very important, and this power has been sold at very low rates, and that had been very important in cutting the costs of all manufactured articles where power is used. It is one of the things which accounts for the low prices under mass production in this country as compared to other countries, but there was a void there, there were a great many isolated plants, and the electric companies were able to go to these manufacturers having isolated plants and take on the business and retire the isolated plants but that can only go so far, the void will be filled up, and the result will be, when we do have a business

depression, the electric companies are going to suffer in a way that they never suffered before, and there is a real hazard there in my opinion.

Q. In that respect the very progress that electric companies have made in expanding their business and reducing rates is in itself a new hazard of the business? A. An element of danger no doubt.

Q. Because it makes full progress to a large degree in the hazards of industrial business? A. It does.

Q. Considering industrial business generally to mean unregulated industrial business as contrasted to utility companies. Do you know any industrial business in which the maximum earnings are anything like 8%? A. I don't think of any at the moment. In an industrial business you expect to make, 15, 25 or 40 per cent in a year of prosperity on your investment.

Q. And it is those facts of those large unlimited gains that offset the risks in that business. A. Offset the risks because of course in years of depression they earn very little.

Q. What would you say about the banking business, the range between making the minimum return of capital invested in a banking business? A. I don't understand exactly your question.

Q. I mean would you give any idea of what the maximum return that is obtained by successful banks on their capacity as contrasted with——

(Mr. Miles) Are you talking about investment banking houses.

(Mr. Markell) No, Commercial banks.

A. Commercial banks when they are organized, undoubtedly the organizers hope that they will make ten to fifteen per cent. on their capital. Some of them do.

Q. Many of them do, don't they? A. Many of them do as they develop the business.

Another hazard I think in the electric light and power business is the fact that if a change does occur in operat-

ing conditions and costs go up the companies are confronted with great difficulty in promptly advancing their rates to overtake the increase in the cost of operation. There is always a very serious lag under conditions of that kind which is against the company, practically always. The costs go up but the increase in rates come along perhaps a year or two years or three years later after those changed conditions.

Q. And an industry of course—an industry without regulation, they put their price right up and make the consumer pay the difference toward the increased costs.

Q. Now, when you speak of a return of 8% as the lowest limitation that would permit capital to go into business, will you tell the Commission just what you mean by a return. I mean do you mean by that in it is a maximum, in what sense it's minimum or an average? A. I think it would have to be an average return. What I mean is this: I don't believe that you could go out and raise a very large amount of capital to buy or construct a company similar to this unless that capital had a reasonable grounds of expecting a return on the average of at least 8%, and if you couldn't raise a large amount of capital to build or buy a situation of that kind, certainly it seems to me it's discrimination to the capital already invested in the property, which cannot easily be withdrawn, unless the rates were such and were similar and were equal to that with which would be required to exact that capital when you were starting a new one.

Because a company can borrow a certain amount of bonds at 5 or 6 per cent., or preferred stock from 6 to 7, I would say had no relation at all to the return which must be spread over the whole enterprise.

Q. Assuming that a company is allowed not more than a certain return by a Public Service Commission that is allowed it in the sense that they will be permitted to reach that and not exceed it, what would normally be the relationship between a maximum of that kind and what the company would actually realize in a period? A. Undoubtedly, under adverse conditions, the company would realize much less than the rate fixed for periods of great activity and favorable conditions.

Q. So that unless a rate of return was fixed as an average rate of return, so that the Commission would allow the Company to get that amount in the long run, of course the average that they actually get will be less than any fixed maximum? A. Bound to be less.

Q. Do you consider the present or the year 1925, viewed from the peoint of view of general business conditions, as good, fair or average? A. It was a year of very good business, very satisfactory conditions.

Q. You mean 1925? A. Yes, 1925.

Q. Do you have any reason to anticipate better conditions than in the year 1925? A. I wouldn't think so. I think businessmen in general would be pretty well satisfied if in 1926, they duplicated their returns for 1925.

Q. Now, I asked you those questions with reference to business generally; how would you answer them with reference to utility business? A. I would say they were very favorable figures for the utility companies. The country was generally prosperous the people used the service of the utilities with a good deal of lavishness, and the industrial concerns used a very large amount of current.

Q. Suppose a Commission were to establish a maximum rate of return based on present conditions, that is the acutal conditions in 1925, and conditions for the year 1926, as far as they can be forseen at the present time, what in your judgment would be the relative probabilities of that return being acceded or falling short of by future changes in business conditions? A. Well, I would say that the chances were at least equal to the hope of benefit that the return would be lower. I don't know, there doesn't seem to be any very serious clouds on the financial horizon at the present time, but it seems to me there is only a question of time when we will have some recession in business. Now, just when that will occur I can't tell, and when we do have a recession in business I say that will have an unfavorable effect on the electric light and power companies in these large industrial loads.

Q. You have already referred to the difference be-

tween maximum and average return and to the element of lag involved in getting increases in rates. What in your opinion would be the effect of any particular rate on the attraction of capital, notwithstanding the conditions you have just referred to a practice of regulation were to develop which would involve adjusting rates downward to limited maximum as often as say three times in a period three years? A. Well, it's great benefit to any industry of course to have the rates stable and not subject to frequent reduction. It's fortunate, I think be for the great benefit of the Company and the frequently disturbed. It affects all the customers of the company and its affects of course, has a tendency to reflect on the credit of the Company, and what would I thing be for the great benefit of the Company and the public and investors as well would be as large a measure of stability in the rates as is possible.

Q. Are you familiar in a general way with this enterprise that's commonly known as the Conowingo development? A. Yes.

Q. And with the financing of that enterprise? A. In a general way, although we were not identified with it, so I don't know it intimately.

Q. Will you tell the Commission whether or not in your opinion it would be or would have been possible to attract capital in an amount of upwards of fifty million dollars investment in such a project on the understanding that the return on the value of the property in which such investment is made shall be limited to a maximum of 7% if the financing were done as a strictly independent venture, not supported by the credit of the Philadelphia Electric Company through a lease or any other contract more or less in the nature of a guarantee? A. Well, it's my opinion that it would have been impossible, absolutely impossible to have enlisted a large amount of capital necessary for that enterprise as an independent undertaking under a regulation or limitation which would have meant that the return on that capital invested should be limited to 7%. I feel confident that no such amount of capital would have flowed into the project under conditions of that kind.

Q. Why wouldn't it? A. Because the prospective rewards wouldn't begin to offset the hazards of the undertaking. As a matter of fact, the way it was done there were very few hazards. Here is a contract with the Philadelphia Electric Company which provides, as I understand it, a contract at least of certain payments, and the Philadelphia Electric Company is obligated to make those payments, and until you might say the common stock of the Philadelphia Electric Company is wiped out those payments will be made, and that gives the securities of the Company many of the attributes of the bonds and the Preferred Stock of the Philadelphia Electric Company itself, and of course with that obligation, and with the strong credit behind it, it was possible to raise the money, but of course it would be possible for the Philadelphia Electric Company to raise a very large amount of money in the neighborhood of 5% if it wanted to sell its bonds.

Q. That would in effect be giving it a preference over the whole general investment of the Philadelphia Electric Company? A. It does give it a preference to a certain degree, it certainly gives it a preference over the dividends on Common Stock.

Q. So what the Philadelphia Electric Company would be able to finance a part of its enterprise in that way for would depend very largely on the amount of return that the Philadelphia Electric Company was getting, not from that particular enterprise but from its whole business? A. Well, the rate at which you could raise the capital for this project would depend of course upon the general credit standing of the Philadelphia Electric Company; as long as that was high it could raise the money at a relatively low rate, because the credit of the Company is behind the project.

Q. So that that financing on the credit of the Philadelphia Electric Company therefore depends not on the return that will be yielded on the Conowingo project, but ultimately depends on the entire return received by the Philadelphia Electric Company on its whole property? A. That is true in my opinion.

Q. There has been some testimony in this case show-

ing that this Company has been able and is able, or at least has been able within the last year to borrow money on its bonds at a very favorable rate, in the neighborhood of 5%?

There is also testimony to the effect that barely five years ago, in the beginning of the year 1921, this Company paid as much as 8.3% actual cost for borrowed money?

You have already referred incidentally but I will ask you again to state to the Commission specifically what in your opinion is the difference between cost of borrowed money and return on property as a whole? A. Well, the cost of borrowed money only has an incidental bearing on it. A company with a very large amount of collateral, with very large assets, could borrow of course a small amount of money at a very low rate. However, that wouldn't mean that you could attract all the capital necessary to buy or create the undertaking unless you had a much larger return, a much higher return upon the total investment than the rate at which you could borrow a relatively small amount of money on bonds against deposit.

Of course, if these public utilities were not able to finance their bonds at relatively low rates, if we will say they had to have all of their capital obligations in the form of stock, you would have to have a rate of return of much higher than 8% in order to permit them to functiton, in order to permit them to attract capital. They would be earning a per cent. on the stock of the company and pay out all its earnings in dividends, they might be paying six or six and a half per cent. and the stock wouldn't sell at a price which would equal the investment, but because they can, because these utilities can mortgage a certain part of their property and raise some capital at lower than 8% it is possible for the companies to function and to attract capital with a return spread over the whole undertaking of 8%.

Q. Let me pursue that thought that you just brought out a little further. Suppose that a company were to be formed for the purpose of taking over or constructing, either one, an enterprise such as this Company as a

whole, if a new company either to buy or build such a property as our property were to be absolutely free of bonded debt and were to undertake to finance on stock alone, would it or not be possible to finance such an enterprise on stock alone with the understanding that the company would be allowed to earn not more than 8% on the total value? A. In my opinion it would be impossible to finance the company under such circumstances.

Q. So that it's only the ability to borrow money at substantially less than 8% that makes it possible for a company to do the necessary stock financing to exist on 8% and to establish a credit to borrow at lower rates? A. That is true. The earnings per share may go up well above 8% on the Common Stock, but with all the hazards that the Common Stock takes it must always be subject of course to refunding the obligations of the company. Frequently there is ahead of this Common Stock Preferred Stock as well, and therefore it increases the hazards in the ownership of the Common Stock, and the earnings per share on the Common Stock must be under such conditions in order for the stock, if it has a par value, to sell at par the earnings per share must be well in excess of 8%.

Q. So that the greater the amount of Prior Preferred Stock and bonds the greater the hazards of the Common Stock? A. Undoubtedly.

Q. And the greater the hazards of the Common Stock and the smaller the amount of the Common Stock the greater the earnings must be on that? A. The greater the earnings must be on that to offset the increased hazard.

Q. And vice versa, the greater the earnings on the Common Stock and the greater the Common Stock equity behind the bonds the cheaper you can borrow this money? A. The better protected are the bonds and therefore the lower rate or net yield at which they can be floated.

Q. Now, looking at the matter in the long run, what one element, if any, would you say is the most important element in the financial condition of a utility that affects the value of these bonds and the cost of money and the

price at which it can issue stock? A. Well, nearly all values I think, get back to a question of earnings. It's a question of earnings that make credit. Now, with that we must have, in order to get the greatest advantage out of those earnings, a sound financial structure; satisfactory earnings plus a sound financial structure give the company very high credit.

Q. What do you mean by sound financial structure; ratio of stock to bonds? A. Ratio of stock to bonds, mustn't have too high a funded debt, too large a percentage of Preferred Stock, or too high a percentage of debt and Preferred Stock.

Q. The Financial structure itself, or at least the ability to improve the financial structure is affected by earnings? A. Very likely to be, because with satisfactory earnings it permits the company to sell additional Common Stock or additional Prefrreed Stock and build up the margin behind the bonds, and also of course it means probably a larger investment of surplus in the property, surplus earnings above the dividends declared, and all of these influences tend to improve the credit of the company.

Q. There is evidence in this case that from the 31st of January, 1921, which seemed to be the low point in this Company's condition as to earnings and financial structure, 77.7% of the entire capitalization of the Company was represented by bonds and indebtedness, and 23% by Common Stock, the Company at that time having no Preferred Stock.

What would you say as to that financial structure; would you consider it good or bad? A. I know of very few companies with as high a percentage of bonds to total capital as that which enjoys good credit. In other words, that is not a conservative financial structure.

Q. Now, will you tell the Commission how, in your opinion, it would have been possible to improve that financial structure without a good showing of earnings to make stock financing possible? A. I would think it would have been very difficult for the Company to have continued to raise capital under such conditions. Certainly the bonds, with a structure of that kind, would

have to be floated at a high rate of itnerest, and the stock would have to show a very high rate per share in order to justify purchase of that stock in view of the hazards involved, the hazard due to the fact that you preceded it by a very large mortgage debt. Strong companies in New York, like the Brooklyn-Edison and New York-Edison, Consolidated Gas, and even the Commonwealth-Edison of Chicago, the debt runs about thirty to forty per cent. of property value.

Q. There is also evidence in this case that at the end of the year 1925 that is, on the 31st of December, 1925, the financial structure of this Company has changed so that at that time 61.68% of its capitalization was represented by bonds, 14% by Preferred Stock and 24% by Common Stock. How, in your judgment does that financial structure compare with the structure in '21 that I referred to in the previous question? A. It's a much improved financial structure and naturally the securities, the bonds, all of the securities in fact of the Company should now sell on a better basis than they did in 1921, assuming the same general market conditions.

Q. There is evidence in this case pending to show that for some four years, say from the 1st of July, 1917, to the 1st of July, 1921, this Company had made virtually no additions to its surplus; something in the neighborhood of only one hundred thousand dollars in a period of that length.

And since the calendar year 1921, up to the end of the calendar year 1925, the earnings have been sufficient to make substantial additions to surplus, so that the surplus has increased at least six or eight million dollars between the 1st of January, '22, and the 1st of January, '26?

What effect in your opinion would that accumulation of earnings have on the ability to borrow money? A. Well, a conservative dividend policy usually tends to improve the credit of a company. I can't see that it would make any difference really in the price at which the bonds would sell if the dividends had been higher but the Company had sold an additional amount of Common

Stock, the equity would have been there at any event. The earnings and the surplus belong to the stockholders.

Q. I mean asuming that all dividends had been the same throughout all that period except the last few months of '25, and the difference is a difference in earnings, so that from June 30th, 1917, to December 31st, 1920, the Company added and was able to add only about $150,000 to its surplus, but in the latter period, from the end of 1921 to the end of 1925, the Company was able to add by the same dividend policy between six or eight million to its surplus? A. That policy should help the credit of the Company.

Q. And the improved earnings would naturally help it? A. The surplus must have been derived I take it by reason of the increased earnings.

Q. What relation do earnings have to do with the price at which Common Stock can be disposed of? A. Earnings are very important of course. It's the earnings per share I think that is perhaps more important than the amount distributed in dividends. I know we have one public utility in New York that pays no dividend and never has paid a dividend and yet the stock sells above $100 per share, but it's the earning per share, present and prospective, that have a great influence upon stock, and the investor, in buying the stock, he either takes a low dividend knowing that it's so well protected that it's almost like a bond, or he buys the stock paying a low dividend we will say at a relatively high price, feeling as I say that that is protected or will come higher in the future. It's the influence.

Q. Whether the increased dividends come or not his own capital investment is increasing? A. His own capital investment is increasing.

Q. There is evidence in this case that this Company, beginning with the last quarter of the year 1925, paid dividends on its no par Common Stock at the rate of $2.50 a share, and in the course of the same quarter the Company issued a substantial amount of its no par stock, approximately five milion dollars in proceeds, at a price of $35.00 a share, which was equivalent to 40%

increase over the best price at which the company had previously issued Common Stock, and 40% over the par value of the former stock which had been converted into no par stock.

There is also evidence to the effect that in the year 1925, the Company earned $6.00 a share on its Common Stock, and that under the Company's estimates under existing rates it will earn $5.00 a share on its Common Stock in the year 1926.

It has been proposed by some of the counsel and witnesses in this case that rates should be cut so that the prospective earnings on the Company's Common Stock would be cut from $5.00 a share or $2.50 more than the present dividend to say $3.75 a share or one-half the present margin over dividend.

Will you tell the Commission what in your opinion such a reduction in earnings, even assuming that there is no reduction in the Company's dividend, would have on the value of its stock and the ability to finance through additional Common Stock and the price at which financing could be done? A. In my opinion stock under such conditions could only be sold in relatively large amounts at a very much lower figure than the price which I understand the Company received.

Q. Than the $35.00 mentioned in the questioned? A. It seems to me now you have no par value stock here, but the book value of your stock is now about, as I figure it, $37.00, that is to say I am taking the capital assigned to it plus your surplus, and if you were to recapitalize now, and get out stock we will assume with a par value, and wanted to keep the same number of shares, you would get out a par value stock of about $37.00, you would have difficulty in selling, even on your present earnings, your stock at its true par today in large amounts.

Q. Forty-seven and a half? A. Yes, I think so, which gives the true par of your stock under existing conditions, and certainly it seems to me that it would be held unjust to the stockholders to take such action that would depreciate its value far below its true par.

Q. You think there would be difficulty in recapitalizing large blocks even at thirty-seven and a half? A. Within a large amount. I think you can just about do it on your present rates and your present rating, but I say if you decrease it now it would have to be very much below par, and I would say even today I think $35.00 is about as high as you could get, whereas the true book value is about thirty-seven I think.

But the suggestion has been made that we are suffering from an unnecessary accumulation of surplus earnings and that the amount of earnings on Common Stock over and above the amount distributed as dividends be cut in half, and what effect in your judgment would that proposed change have on the ability to dispose of stock at say it true par of thirty-seven and a half? A. I think under such conditions it would be impossible.

Q. It has been suggested in this case that this Company has now accumulated such a surplus, and is now accumulating a surplus so rapidly and to such an extent under the conditions mentioned in previous questions, to wit, earnings in 1925 of $6.00 a share, and prospective earnings of $5.00 a share in 1926, on the Common Stock on which $2.50 is paid as dividends, and it is further suggested that our financial condition is now so good, and the Company is able to borrow money at such a low rate, that all of these circumstances taken together indicate that conditions have so changed that the Company ought now to be allowed a lower rate of return on its property than it was allowed as recently as three years ago, and that that rate of return ought to be cut for the express purpose of cutting in half this annual accumulation of the difference between $5.00 and $2.50 a share on Common Stock.

I will ask you to assume, as has been suggested in previous questions, that the present condition of the Company its ability in the latter part of 1925 to raise about five million dollars on no par stock at $35.00 a share, its ability in the same year to put out bonds at a cost of approximately 5% as compared with its condition in the year 1921, when at the beginning of the year it had to pay 8.3% as the actual cost of borrowed money, when

for a period of at least three and a half years it had actually been earning less than 6% on its property, and that that condition in 1925 had followed a period of four or five years from the beginning of 1921, during which period the Company received a substantial increase in rates in the middle of the year 1921, and during which period the Company had improved its financial structure by issues of Preferred and Common Stock with the result as two percentages indicated in a previous question, and during which period the Company, after keeping its surplus at a standstill from 1917 to 1921, had added some six or eight million dollars to its surplus.

I will ask you to assume to be true the various matters recited in this question as being supported by evidence in this case, and then to tell the Commission to what extent, in your opinion, this improvement in financial conditions depends on the Company's receiving and continuing to receive a fair return on its property, and whether or not in your opinion it indicates that the financial condition is such that the fair rate of return ought now to be lowered or could be lowered without impairing its very financial condition and in answering that question I will add this further hypothesis to wit, that since the low point, beginning in 1921, this Company has earned during the calendar year 1921, in the neighborhood of 6½% on its property, in the year 1922 a fraction over 9%, in the year 1923, a fraction over 9%, the rates being reduced by order of the Commission in the middle of the year 1923, in the year 1924, 7.7%, in the year 1925, eight and about six-tenths per cent., the Company voluntarily making a rate reduction toward the end of 1925, and for the year 1926, the Company estimates a return of about 7.7%?

(Mr. Miles) Now, I dare anybody to ask the Stenographer to re-read that question.

NOTE: Part of previous question here re-read by stenographer, as follows:

"Q. • • • I will ask you to assume to be true the various matters recited in this question as being supported by evidence in this case, and then to tell the Commission to what extent in your opinion this improvement in finan-

cial conditions depends on the company's receiving and continuing to receive a fair return on its property, and whether or not in your opinion it indicates that the financial condition is such that the fair rate of return ought now to be lowered or could be lowered without impairing its very financial condition. * * *"

Q. The question is this, Mr. Hoyt; assuming to be true the various matters recited in the question, I will ask you to tell the Commission and give your reasons whether in your opinion these facts indicate that the company's rate of return is now too high and it should and could be lowered without injuring the company's financial condition, or does it indicate that the existing financial condition depends on the rates of return and should not be lowered?

(Commissioner Harper) Is it a proper part of the hypothesis something that's going to happen; aren't you dealing with actual facts in the record when you base a hypothetical question——

(Mr. Markell) Hypothesis of what is estimated.

(The Witness) You start back with 821 when the company was paying even on borrowed money something over 8%; I think it's pretty evident that with an 8% return at that time the company wouldn't have been able to function. In other words, if that condition had continued for a while the return would have to have been even higher.

Now in the meantime the company's securities have improved in value; rates at which the company can borrow money have come down, but they have come down it seems to me by reason of the fact that the earnings were as you related them to me, and then unless the earnings had been approximately as you have related them to me, it would be impossible for the company to have its securities sell on a plane at which they sell at the present time.

(Mr. Bryan) Do you answer yes or no?

(The Witness) He asked me to explain my opinion.

(Mr. Miles) It's as clear as the question.

(Mr. Markell) The answer is much clearer than the question. One other question, Mr. Hoyt.

(The Witness) If I may interrupt you there just a minute, Mr. Markell. I can't see in connection with that question, the second part of it, why on account of the fact that these securities do sell better, the reason for their selling at higher prices being due to satisfactory earnings, is any reason why the rate of return should now be reduced. I don't see where that follows.

(Mr. Bryan) Is that a legal opinion?

(The Witness) In my opinion.

(Mr. Bryan) Isn't that a legal question though?

(Mr. Markell) Financial question, I should say.

(The Witness) Practical question.

(Mr. Bryan) And also a legal question.

(The Witness) Well I don't know just what law is involved.

(Mr. Miles) At least you offer it as your best opinion you can give on that.

(The Witness) Right.

Q. If the rate of return were reduced then that financial condition would—— A. Of course it would be very much effected, obviously effected if the rates were reduced.

Q. And then after it was adversely effected the rates would have to be increased to restore that condition? A. Quite possible.

Q. And the only effect there would be there would be no stability in conditions? A. It seems so to me.

Q. Now just one other quetion. From your personal knowledge of conditions of all the kinds that have been discussed in your testimony as effecting rate of return, please state your opinion on this effection.

Assume that as recently as June 1923 it were determined by proper public authority what basis in the way

of relationship between the value of property and return on that property were a fair basis or rate of return on which to base the rates of this company, is there any reason why at this time a lower rate of return would now be a fair rate of return for this company? A. I don't think so. It is sometimes argued that bond prices are now very much higher than they were in 1923; that the cost of public financing on the part of these utilities in view of market conditions now obtaining can be done much more cheaply than financing could have been bone in 1923 we will say, and that therefore the public is entitled by reduced rates or what not to share in changes which have come about since that time.

In my opinion those changes are more apparent than real. While you see bonds today selling higher or at a lower yield than you did in 1923, I think it will be found in nearly every case that the credit of the obliger has greatly improved since 1923 and that the security is better than it was in 1923. And where there has been no change to speak of in the merit of the security and the margin protecting the security you won't find very much of a change at which the security sold.

I know I happened to be looking up a company here in Baltimore, and that was the United Railways and Electric Company, the first mortgage bonds of that company were selling at about where they were or perhaps a little lower than they were in 1923, I think, although the company is doing reasonably well, a little better each year, but there has been no startling improvement in that situation, no improvement such as we have had with the Electric Company, which has been more fortunately situated and therefore I don't follow this argument that there has been such a change in conditions that financing can be done so much more cheaply now, that therefore there should be some reduction in the rate of return necessary on the whole enterprise. In my opinion it would be still necessary to raise the capital, to enlist the capital to provide the enterprise, comparable in size and character with that of the Consolidated Gas & Electric Company to have a return and expectation of at least 8%, and then I don't see that there has been any change in conditions which would reduce what might be

termed a fair and reasonable return as between 1923 and 1926.

CROSS EXAMINATION.

By Mr. Miles:

Q. Mr. Hoyt, you testified before this Commission approximately a year ago, did you not? A. Yes, sir.

Q. In what case was that? A. The United Railways & Electric.

A. I didn't know whether it was that or the Telephone Case. What did you testify to then was the rate of return to which the United Railways & Electric Company was entitled? A. I said at that time that the return would have to be at least 8%; if you were to attempt to reproduce the property to attract the capital to reproduce it you would have a return of at least 8%.

Q. So that you think the rate of return which would be required by the United or by the company to reproduce that property is the same as would be the same to reproduce this particular property? A. You have got to have a return to enlist the capital necessary to create these utilities, you have got to have 8%, in my opinion.

Q. That's what I want to get at, Mr. Hoyt. Is it your contention that this Commission should adopt a flat yard stick or measure by which to determine rates of returns for all the major utility companies which are under its jurisdiction? A. That would better depend upon the evidence produced, if that's the necessary rate in order to attract the capital to permit these companies to properly function, then I should think the rate should be whatever the evidence is offered.

Q. Let me put my question another way, sir, because I don't think that's really responsive.

What are the factors which guide you in determining what in your judgment represents a fair rate of return for this company? A. It's my experience, general experience that would be necessary, what inducement would be necessary to enlist the capital.

Q. And that is the sole factor which you consider in determining what you think would represent an adequate rate of return? A I don't know whether it's the sole factor, it's the most important factor.

Q. What other factors do you consider? A. Well I would consider that there might be locations where you would have to have a higher return on account of difference and character of population, or not so favorably, situated, or franchise rights unsatisfactory, or things of that kind.

Q. Then isn't this true therefore that when you get ready to determine the fair rate of return for a utility company, you must treat each utility company on its own separate bottom, taking cognizance of the peculiar circumstances and conditions which surround each company and not attempt to prescribe an arbitrary rate for all public utility companies of the general size? A. Well then the better utilities I think, electric companies, major companies have a great many points of similarity, and I believe that a rate of return that would be fair in one city would probably be fair in another city where conditions were very similar. A great many companies I would say are very greatly associated in this major question of rate of return.

Q. I am not trying to spar with you or heckle you, but do you think then that the same rate of return should be fixed for the Consolidated Company, for the United Railways & Electric Company, and the Chesapeake & Potomac Telephone Company? A. You are asking me another thing. The same rate of return, you mean to say that a Commission in fixing rates of fare or what not should be guided—they must take into consideration what the traffic will bear, etc.

Q. Of course. A. But I would still say that you couldn't enlist the capital necessary to create the railways here, if there were no railways here, with an expectation of under 8%, and I would say the same thing about this company.

Q. How about the Telephone Company? A. I don't

know so much about the company, but in my opinion you would have to have 8% on the Telephone Company.

Q. Right. Now, Mr. Hoyt, I was very much interested in your testimony about the Conowingo project, and I as understand it in substance it is this: that the only reason the Conowingo can operate on 7% rate of return is because of their very favorable relations with the Philadelphia Electric Company and because the credit of the Philadelphia Electric Company is pledged? A. Yes.

Q. Well now doesn't that indicate therefore that you consider the peculiar conditions of each company when you get ready to fix the rate of return of that company? A. Well if you are going to ask me peculiar conditions, you might say what rate of return would be necessary for this company to make an issue of bonds

Q. I am coming to that. But I am asking you now whether that doesn't indicate that you yourself consider the particular circumstances of each company when you attempt to determine what should be a fair rate of return? A. Oh, no, I wasn't calculating a fair rate of return in the case of Conowingo, it's a rate that was necessary to be promised by the Philadelphia Electric, and whether it's fair enough or reasonable enough——

Q. But you know what rate of return has been fixed by the Pennsylvania Public Service Commission. A. In which case?

Q. In the Conowingo project? A. I understand there were several regulatory bodies involved in that decision, in the permits which they had to get.

Q. Do you know what the Pennsylvania Public Service Commission—— A. For the time being I understand they say 7% will be permitted.

Q. Now let's be frank with one another. Mr. Hoyt, wasn't the reason for the Pennsylvania Commission in fixing that 7% because of the relationship of that company with the Philadelphia Electric Company? A. Probably was.

Q. Yes, sir. And wasn't it because, as you have said, that it was due to the splendid credit condition of the Philadelphia Electric Company? A. Yes.

Q. Is the credit position of the Philadelphia Electric Company any stronger than the credit condition of the Consolidated? A. Perhaps a little bit, and the Philadephia Electric can't continue to function indefinitely. I didn't say that 7% would be a fair return on all of the property of the Philadelphia Electric. Sure 7% on this one part of its property may be enough to finance with, but that doesn't mean that that's a proper return on all of the Philadelphia Electric Company.

Q. Is the general credit position of the Philadelphia Electric Company any stronger than the general credit position of the Consolidated Gas Electric Light & Power Company? A. Somewhat, yes, in my opinion.

Q. Now why is it in your opinion somewhat stronger? A. It's a larger company and it hasn't as large a proportion of its capitalization represented by bonds and preferred stock.

Q. Do you know Mr. Hoyt where the majority of the securities of the Consolidated Company are dealt in? A. Where they are dealt in?

Q. Yes? A. I don't know positively. I presume they are dealt in here in Baltimore, but what happens is this: usually when a company, having good credit at home, desires to borrow a reasonably large amount of money, the securities are first sold outside, the local market will take a certain percent, but the local market will not take all the offering made by the company, and a majority of them are sold outside of the locality in which the company is located in the first instance. Gradually those securities tend to come back, because if the company is well regarded at home the people like home securities, and the securities gradually gravitate back to home market, but the home market is seldom sufficient to produce the necessary capital for these utilities which are growing rapidly. You have to go outside to attract the capital to do all of your financing.

Q. Now how well acquainted are you, Mr. Hoyt, with the general operating results of the Consolidated Company in the past few years? A. Only in a general way.

Q. Only in a general way. You don't profess to know then the particular circumstances under which this company operates, do you? A. I know what their last annual report showed, and I understood what the rate of return was on their property values for the last several years; I have known the increasing prosperity as indicated by the appreciation in their securities, but I don't know the details.

Q. Do you know what the Consolidated estimates its rate of return for the year 1926 assuming that their present rates are continued? A. I have understood that they estimated that they would make 7.7% next year.

Q. Which of course if under 8%, which you think is the minimum which the company should be permitted to earn? A. I think that under conditions such as we have at the present time it will be a very serious thing for the company if rates were so effected that under conditions such as we have at present that they could earn at least 8%.

Q. Why then do you think that the Consolidated is willing to earn 7.7 rather than 8? A. 7.7, perhaps a year afterwards they will make it up, it must be toward a standardized rate, one year a little below and next year a little above, but on the average I think it must average 8% when business conditions are reasonably favorable.

Q. Then you opinion is that the Consolidated is willing to do that because in the year 1917 and subsequent years its rate of return will be 8% or over? A. I think it would be willing to do that provided it was not hampered by a limitation that would prevent it from earning 8%.

Q. Now you said something about 8% being necessary for a new company, do you think that the same rate of return is necessary for a company with an established record as satisfactory as the record of the Consolidated

as for a new company? A. I don't see why not. I mean anything that isn't fair to the investment that is already here. If you are going to apply that investment to serving the public at a rate which would not be satisfactory for new investors to come in and provide the service.

Q. All right, then tell this Commission whether you think the investor takes as big a risk when he invests in the securities of a company with an established satisfactory earning record that this company has, as when he invests a like amount in a new concern? A. No, I don't think he does.

Q. He does not? A. No.

Q. Isn't the risk one of the things that's considered in fixing rate of return? A. Certainly, yes.

Q. Then why should the rate of return be the same for an old company as the new company? A. Because I don't think it's fair to penalize. I am assuming that new capital wouldn't come in and provide this service assuming you had been through your development and that your business had grown to the same stable condition that this is, wouddn't finance it unless it had an expectation of 8%. Now because the investor is already in, I say it isn't fair to him to compel him to take a lower rate than would be expected of new capital which was to develop the situation and had arrived at the same point of stability and history behind it.

Q. Then this is true; you think 8% would represent a fair rate of return for a new company and would be satisfactory to the investor investing his funds in the new company, and simply because of that fact you don't think the investor in the old company should be penalized? A. No, I say that 8% would be fair for the new investor providing the company had earned at the same state of development that this company had earned at. As a matter of fact it is questionable whether a new company such as you mentioned could be developed with an expectation of 8% only.

Q. I didn't mention the new company, you did, sir. I was just trying to get out of you what you had in mind. A. You asked me about that.

Q. That's correct. Now you made some comparisons with rates of return of utility companies and I think particularly power companies with industrial companies. Do you think that any such analysis is even relevant? A. Well, after all the utilities must compete in the market for funds.

Q. Do you think that the average industrial concern has the same assurance of reasonable return that the average utility company enjoys? A. It doesn't enjoy the same stability of business; the average industrial doesn't enjoy the same stability of business. I don't know about the average return taking good years with bad; the industrial makes 20 to 25 one year and perhaps nothing the next. Some industrial securities will sell at higher prices than the utilities and some lower.

Q. No question about that. And isn't it true that the average investor goes into the industrial proposition for speculative reasons? A. You mean in the Common stock.

Q. In most of its securities. A. You take United States Steel, 5% bonds will sell higher than the 5% bonds of this company, and the preferred stock will sell higher, too.

Q. Is that true of the average industrial, too? A. No.

Q. Of course not. What was the general level of interest rates on public utility bonds in 1922? A. I can't tell you that.

Q. Was it more or less than at present? A. I am not so sure there is much change. As I look over the average yield of ten very high grade railroad bonds from 1923 to the present time there has been very little change.

Q. Yes, sir, but as you look over ten bonds of the public utility companies do you find the same situation to be true. A. Find the public utility bonds are higher, but the companies are much stronger and much better protected now; bonds are better.

Q. Now assuming that the general level of interest or

the cost of money to public utility companies has declined since 1922, could not a public utility company with the same amount of security to offer acquire funds at a lower rate of interest today than it could have three or four years ago. A. That's possible if you assume that.

(Mr. Markell) A contradiction involved in that assumption.

Q. Now suppose the company has increased its security today as compared with 1922, wouldn't they have to pay less for money. A. If it increased its security?

Q. Yes sir. A. If its bonds are better and there is a lesser amount of bonds as compared to the property value outstanding, it could raise bond money a little better. I can't see that necessarily the company could function as a whole on any lower rate of interest.

Q. Now in 1923, as I understand it, Mr. Hoyt, this Commission fixed a rate of return to this company which I think it estimated not to exceed 8%. Do you think that that was a fair rate at that time? A. Not to exceed 8%; I think it should have said at least 8%.

Q. At least and to exceed. Just what is the distinguishment you are making there? A. Well, I mean to say if a Commission had said its fixing rate now which on the average would produce 8% on the property value, assuming normal operating conditions, I would say that that was a fair rate.

Q. I think the Commission's opinion said "Not less than 7 or more than 8." You don't think, then, that that was a fair rate? A. I hardly think that was a reasonable rate, under the circumstances.

Q. And you think in order for it to have been a reasonable rate under the circumstances the Commission should have used a phraseology, "An average rate of return of 8%." A. I rather think so.

Q. Over what period of time do you think that that average rate of return should be permitted to continue? A. I can't exactly say, but it seems to me that the rate —one of the great difficulties of these public utilities are

shifting rates it seems to me, and if a company is permitted to put in effect rates and it produces between 8 and 9 per cent on its property value over a period of public interest to disturb those rates.

Q. Even though the average is over 8% for a period of years you see no reason? A. Yes.

Q. Now suppose the average goes up between 9 and 10 percent? A. And it's there for two or three years, then I should say it's time for the Commission to step in, but as a matter of fact the electric light management doesn't take 9 or 10 per cent. They put into effect themselves reduced rates.

Q. Then as I understand it you think that in order for their rates to be reduced they should earn more than 9% for two or three years? A. I don't think that a rate in the neighborhood of 9% is an unreasonable rate considering that in a year of great prosperity they make that in view of the fact that it often runs below that any may run below that for several years.

Q. Now assuming that the rates which the Company want to continue in effect would permit them to earn on the average of 9% for four years, would you think that their rates should be disturbed any? A. I wouldn't think so. I think the company itself probably would.

Q. But if the company wouldn't do it, you don't think that the Commission should? A. I hardly think that is an extraordinary, exorbitant earning.

Q. Your position then is this: that if the Company earns 9% for three or four years, averages 9%, and don't want to reduce its rate, it shouldn't be required to, but at the same time you think the company ought to reduce its rates as a question of managerial policy? A. A company, in order to consolidate its position in the locality in which its located, would probably voluntarily reduce rates, but I wouldn't say that 9%, consider the hazards, is an exorbitant rate and is particularly unfair or unfavorable to the public.

Q. Now if it gets up to 9.1%? A. Some reasonable amount above 8%. I should say that sometime in there,

the Commission might, if it feels that it's unfair to the public, step in and ask them to reduce the rates. I don't know just where the point is.

Q. Neither do I, but I want the Commission to find out and I want to find out. We are up to 9%? A. Perhaps four years is too long, but take two years, if that rate is coincidental with a very low rate for the service, and very high grade service, it doesn't seem to me that a company should be penalized, because one year or two it makes 9%.

Q. All right, now we are back from four years to a year or two? A. I don't know what the year is.

Q. You don't know what the year is? A. No.

Q. Let's get together somewhere here. I want to know how long you think the company should be permitted to earn a 9% rate of return before the Commission would disturb it? A. I wouldn't answer that question. That's up to the Commission to decide personally. I don't think it would be unfair to the public, under certain circumstances, to let a company for two years earn 9% on its property value.

Q. Two years, but if it went over 9% A. I don't know, I am not prepared to talk as a Commission and just say whether it's 9.2 or 9.3, then that Commission should hold the company here and say reduce your rates; I can't do that.

Q. I understand that, sir, and I am not trying to spar with you a bit, and you are being very frank, but I don't think you should tell me that that's a matter for the Commission to fix. I talk about 9% and you say 8%. It's just—— A. All I can tell you is what I think is the rate of return necessary to enlist the necessary capital. Now, when you get in the question of protecting the public, etc., that isn't my function; I can only give you my impression on that.

Q. Were you familiar with the financial condition of the Consolidated Company in 1922 and '23? A. In a general way.

Q. If there has been a very marked improvement in the Consolidated Company since 1923 should that improvement be considered at all by the Commission in your judgment in fixing the rate of return? A. Yes.

Q. You think that should be? A. Yes.

Q. So that if in 1922 and '23 an 8% rate of return was enjoyed by this company and since that time their financial condition and their general credit position is stronger today, you think the Commission would be taking unwarranted action in lowering that rate of return? A. Yes, because they fixed a rate of return in 1923 that permitted the company to reach this strong financial condition which enables it to function properly now. If they hadn't done it the company wouldn't be able to do so, in my opinion.

Q. I understand, but if their position is improved, and is very much stronger now, ought they be permitted to continue to earn that rate of return? A. Why, certainly.

Q. Mr. Hoyt, if a rate of return of 6.75% or 7% or anything less than 8% would permit this company to pay all of its operating expenses, pay its dividends on common stock at 10%, meet all of its interest on its bonded debt and put a million dollars a year in its surplus account, do you think that if a 7% rate of return will permit those things to be done, and if the Commission fixed this Company's rates at a point where it would earn only 7%, that that fact would effect the ability of this company to attract capital? A. I don't think that would be necessarily fair to the investment in the property. You talk of 7%, of certain dividends on its stock; now what is the value of its stock. If it has a very large surplus and a very small capital stock why that doesn't necessarily protect the investment in the company.

Q. I don't believe you understand my question. A. Anyway, I don't think the company could continue to function under the conditions you mentioned anyway indefinitely.

Q. All right. If this Commission prescribed a 7%

rate of return for this company, and that rate of return would permit this company to earn a sufficient amount of money to meet all its operating expenses, pay 10% dividends on common stock, meet its funded debt promptly of course and put aside a million dollars a year to surplus, do you think that action of this Commission would effect the ability of the company to attract capital? A. Yes, I do.

Q. In which way? A. Well, I don't think they would be able to continue to sell that stock at a fair price under such conditions.

Q. Even though all of those factors were there? A. Yes, at a fair price and reasonable price.

Q. Mr. Hoyt, I just have one more question and I am through, and I don't want to continue to repeat or propound the same question to you, but at the same time I do want to get an answer sufficiently clear so that when the argument in this case takes place I can't be accused of misquoting you. Now with that statement and that is the only purpose of my question.

I want to know whether in making up your mind preceding your testimony as to what you think is the minimum rate of return that this company should be permitted to enjoy, what factors you consider, and also whether you think or don't think this Commission should treat the operating results and credit position and financial conditions of each company on its own separate bottom when it fixes the rate of return for each one of those companies. A. I think that the Commission should take into consideration the character of the industry, its competition for capital with other industries, and that the financial structure of this company and its financial returns should be given but slight weight by the Commission. I think the Commission should say here is a public utility property devoted to the public interest, it has to compete for capital with other industries having different risks, and that what rate of return should accompany an industry under the conditions of this kind be permitted to earn in order to compete successfully with other companies in other lines of business or in similar lines of business. It seems to me

that's the only fair one to take, what is a reasonable return on the fair value of a public utility property devoted to the public service.

Q. Do you think that this Commission should primarily consider what other electric industries enjoy, and then secondarily to consider the peculiar conditions of this electric company; now is that correct or not? A. I should think that the Commission should consider what rate of return is necessary to protect and promote the electric industry in general, and how far does this particular company vary from the rate of return that would be necessary to enlist the capital for electrical companies.

Q. I am with you on that.

(Commissioner Harper) Mr. Hoyt, in the case of the Philadelphia Electric Company to which you referred in the early part of your testimony, what is the percentage of its bonds to the total amount of the bonds and stock?

(The Witness) The Philadelphia Electric, I can't answer that positively off hand, but I don't think its funded debt exceeds about 40% of its total assets.

CROSS EXAMINATION

(Continued).

By Mr. Tingley:

Q. Just one question, Mr. Hoyt, which may prove to have as many convolutions as some of the others that have been propounded, but in the case of a utility established some years prior to the establishment of State regulations, enjoying a monopoly in a municipality, does the rate of return that would be required to attract capital to a new business have any practical relation to its credit position? A. I don't understand the preliminary question there in a monopoly with no regulation.

Q. No, in a monopoly with regulation and an established business? A. Certainly, the fact of the established business and the fact that regulation is a protection as well as a limitation it's not protection against competi-

tion, probably protection in many ways, protection on the issuance of securities, etc., it enables the public utilities to finance more cheaply than they could otherwise.

Q. What I want to get at specifically is this; in the case of a company which is actually operating as a going concern and has an established business and has built up a surplus, and has a substantial dividend record, is the cost of attracting capital to a new business any factor at all in determining the credit position of this established business? A. Well, I think that you must give consideration to what rate of return would be necessary to attract capital and build up a situation to the point that the existing situation enjoys.

Q. But as a practical matter, does the rate of return that would be necessary to attract capital to a new enterprise have any actual bearing upon the credit position of the established company; I mean does it effect its borrowing capacity or is it considered in determining its credit position? A. It must be considered it seems to me in trying to find what is fair, what is reasonable. It must be considered. It's been considered by the Courts and by Commissions.

Q. Is that as important a factor in determining fair rate of return as the actual rate involved in a particular enterprise whose rate is being determined; I mean what is the more important factor? A. Well of course a company—the difficulty is that that company under an unreasonable rate of return, unreasonably low rate of return could function for quite a while before its credit would be entirely exhausted; it could keep on issuing bonds up to a certain extent, could issue some stock perhaps at a very low price, but the time would come when it could not any longer sustain a sound financial structure, it couldn't issue enough stock to keep its margin beyond or to keep the margin beyond the bond which would enable the company to raise money through bonds at a reasonable rate.

Q. As between these two factors, what do you think is more important in determining the rate of return to be applied a particular enterprise, that is a going concern

with an established business, one the rate which would be required to attract capital to a new enterprise, or to the actual financial position of the established enterprise, and the risk represented by that enterprise by investment in that enterprise. A. In my opinion there wouldn't be very much difference probably if you follow one out to a logical conclusion than the other.

Q. Which do you think an investor contemplating investing bonds in the established enterprise would consider important? A. How do you mean?

Q. Would he be more influenced by the credit position of the established company or by some hypothetical like the rate of return required to attracting capital to a new enterprise? A. It seems to me the only way you can determine what is a reasonable rate of return, assume the company was in a position to sell all of its property to a new class of investor. Now those new investors, buying the whole property, what rate of return would they expect to enlist their money in the enterprise, than you get at what is fair.

Q. I understand the argumentative answer, but what I want to get is a specific answer to the question; what factor would the investor be more influenced by? A. The investor doesn't buy the whole property ordinarily.

Q. He buys an interest in it, doesn't he? A. He buys the stock and the bonds or the preferred stock and the bonds and common stock, and he is effected by a great many considerations; what the company has done, what it will do, what the prospects are.

Q. Is he effected to any extent by such a hypothetical condition as the rate of return which would be required to attract capital to a new enterprise? A. You mean the man buying common stock or bonds?

Q. Yes, either one. A. He might not stop to consider it if he went into the situation the way these insurance companies do. They probably would give that question considerable weight, because the Courts have mentioned it.

(Mr. Miles) Just elaborate a little but on Mr. Ting-

ley's last question, see if we can't get a direct answer. You mean to tell this Commission that if one of the salesmen of the National City Company went in the office of one of their clients, their prospects, and offered to sell him bonds in the Consolidated Company or any other electrical industry that that salesman is very careful to point out to this investor what this company would have to earn, or whether it was earning enough to justify the attracting of capital to a new industry, or doesn't he confine his remarks to the operating results of the company of whose particular bonds he is selling?

(The Witness) He does in a way, and yet it is true that under certain situations, where a regulatory body has been very narrow in its point of view, it has effected the sale price of the securities under the jurisdiction of that regulatory body.

In New York we have had unfair legislation passed by the legislature there, and the fact that there has been interfering influences tending to prevent certain public utilities from getting a reasonable return on the fair value of their properties has been a factor in deciding at what future securities will sell.

(Mr. Miles) Now do you think if I called up Mr. Belknap and asked him if he would recommend an investment in certain bonds of this company, explaining the reasons for that, Mr. Belknap would enter into a discussion with me whether this company is earning enough to attract capital in a new venture.

(The Witness) No, but just the same the market price would finally arrive at a point where that should be taken into consideration.

CROSS EXAMINATION

(Continued).

Mr. Bryan:

Q. Mr. Hoyt, thus far in your testimony you haven't made any reference to the relationship existing between the earnings of a utility and its fixed charges and its dividends and elements of that kind. Let's take first the

comparison between the net earnings and the fixed charges. How many times does the average utility company of good credit earn its fixed charges? A. Two and a half to three times.

Q. Isn't anything over twice considered pretty good risk from an investment standpoint? A. I think it would have to be, generally speaking, substantially over twice.

Q. Your company does sell and recommend bonds where the fixed charges are earned not more than twice? A. Yes, at a price.

Q. How would the price—— A. They would probably be 6% bonds.

Q. On the basis of a 6% return. Now take the case of preferred stock, how many times the preferred stock dividends should the earning available for preferred stock be earned? A. You can't answer that categorically. The best way to figure the investment rating to which the preferred stock is entitled is to take your fixed charges and your preferred dividends and relate those two against the net earnings.

Q. How would you fix the proportions that ought to exist between the net earnings and the sum of the preferred stock dividend and fixed charges? A. Well, the net earnings ought to show—well if you are going to have a high grade preferred stock it would have to show pretty well up to twice the fixed charge and dividends, but anyway over once and a half.

Q. Over once and a half the sum of the preferred stock dividends and the fixed charges.

Now come down to the common stock, what is regarded as a fair margin of safety in the comparison between what is available for the common stock dividends, and what is actually paid on the common stock? A. You see our better public utilities have enjoyed the highest credit and very few of them show preferred stock outstanding, not very few of them, but I mean those around New York have much preferred stock outstanding, as a matter of fact the margin available for dividends on the

common stock runs 50% and in some cases a higher percentage of the total net earnings.

Q. Do you mean then if the common stock is earned once and a half times—— A. No. I don't mean that. I mean for a company to enjoy the highest credit the dividends and preferred stocks should not take up more than about 50% of the net earnings.

Q. You mean the sum of the fixed charges and dividends ought not to be more than 50% of the net earnings? A. Yes.

Q. How many companies are there that enjoy that favorable position? A. I think the Philadelphia Electric Company would, I think the Commonwealth Edison of Chicago would, I think the Brooklyn Edison Company would, I think the Consolidated Gas Company would, I think the New York Edison Company would.

Q. Are those about the only ones that you can think of as in that category? A. No, but you start out with a type, and I am giving you those that enjoy the highest credit, and then it will grade all the way down.

Q. So that your specifications given here this morning as to what the rate of return ought to be are really based on what is necessary in order to bring this company into the same class from the standpoint of credit showing as the ones you have just recently mentioned, is that right? A. Not necessarily, but I say the rate of return must be necessary to provide an income which will enable this company to enjoy that credit.

Q. That isn't quite the answer to my question, but I will ask you again. Is it or not a fact that your testimony this morning as to what this company should enjoy as a rate of return is based on what you consider is necessary to bring this company into the same classs with the half a dozen or so that you have just mentioned? A. I don't, exactly about the same class, but to give it good credit I am assuming a company has a sound financial structure, whatever that may be, as a sound financial structure, and then it must have a rate of return that will enable it to continue to finance assuming it has a sound financial structure.

Q. Referring back to my last preceding question, instead of the expression "bring this company into the same class with the others," I should substitute the expression "to give this company as good credit as the other." A. I woudn't pin myself to say "as good credit," but to enjoy good credit. I don't know just where the point would be.

Q. I would still like to get your answer to that question, Mr. Hoyt. Was your testimony based on the assumption that the rate of return that this Commission should allow would be sufficient to raise this company's credit to the same level as that of these other companies? A. In considering my testimony I didn't think of relating the rate of return which I believe to be necessary for this company as being necessary to bring its credit up to the point of these other companies. However, I don't see that it makes a great deal of difference because where you find a stock representing a very considerable portion of the investment or capital structure, you will find that a stock earning we will say 11, 12 or 13 dollars a share will sell at quite a premium, but on the other hand where your common stock gets down to the point where it represents we will say only 25% of the financial structure, in order for that stock to sell par in good years and bad, and in order to attract additional capital, instead of showing only ten dollars a share it will have to be twelve or thirteen or fourteen or fifteen. You can see as the Common stock is small as compared to the total financial structure the risk is greater and I think must be so.

Q. I still would like to know whether your testimony this morning has been based on the situation of these other companies? A. No.

Q. And what you believe to be the return that ought to be allowed this company as compared with the other companies? A. No.

Q. You didn't have the other companies in mind at all? A. No, I don't think that was a compelling feature.

Q. You consider the Detroit Edison Company to be a

strong company? A. Yes. I consider this company to be a strong company.

Q. Do you think the Detroit Edison Company compares in all particulars with the one we have here in Baltimore? A. In many respects, I think.

Q. Do you happen to know whether the surplus for the year 1925 of the Detroit Edison Company was greater or less that the surplus of that year for this company? A. No.

Q. Do you happen to know how the surplus for 1925 of the Detroit Edison Company compares with the fixed capital of that company? A. No.

Q. Now I notice in your circulars offering securities for sale, I am referring now particularly to bonds, it is frequently stated that a 5% bond is offered at a price which will yield say 5½ or 5¼ or 5¾ or 6. What is the explanation of that difference between the nominal yield of 5%, which is the one that characterizes the bond so far as its permanent qualities are concerned, and the so called effective yield which may be higher? A. You mean on account of the fact that a bond is sold at that discount.

Q. That is the explanation, is it? So that in considering the return on the bond, the investor, if he wants to be accurate, will add to the effective interest paid a proportionate part of the bond discount to maturity, is that correct? A. That's one way of expressing it. The bond yield is really the present worth of all of the subsequent payments, all coupons and the principal.

Q. And you take into consideration the discount or the excess of what the holder will receive at the maturity of the bonds over what he pays for it now? A. That's right.

Q. So that assuming the bonds were issued at a discount, the cost to the company will likewise be somewhat more will it not than the nominal return? A. Yes.

Q. And the cost to the company will be mathematically the same as the return to the investor? A. It would.

The companies seldom keep their books that way; they sometimes write off the discount in one year or any year, or else they might for a certain percentage of the discount and write it off in order to get it on an accumulative basis, like one twentieth of the discount.

Q. They would have to take the summation over a period of years? A. That's right, that's the real cost of the effective money.

RE-DIRECT EXAMINATION.

By Mr. Markell:

Q. Mr. Hoyt, in line with several questions asked you by Mr. Miles and Mr. Bryan, I will ask you to assume that in 1921, as has already been suggested, this company had a financial structure consisting of 7.7% bonds, and the balance common stock, that in that year the company had paid 8.3 for the actual borrowed money, and in the middle of that year this company asked and received from this Commission a substantial increase in rates; that the Commission two years later, in 1923, reduced rates, but determined what would be a fair return for this company; that after that rate increase in 1921, both before and since the rate case of 1923, this company has pursued a conservative dividend policy and has accumulated surplus and has very greatly improved its financial structure by issuing an increased proportion of preferred and common stocks as have already been outlined to you in previous questions, and as a result of all of those circumstances the company's credit has been greatly improved since 1921.

I will ask you to assume that in the same year 1921 there had been another company identically like this company in all respects as to rates, earnings and cost of money, and they had the same experiences and got the same rate increase, and had the same determination by the Commission in 1923 of what would be a fair rate of return, but that unlike this company, this other company which we will call Company B, pursued a reckless financial policy, distributed as much as they possibly could in dividends, borrowed money up to the very limit, and had not improved their financial ratio of stock

and bonds, so that at the present time Company B had a very poor credit and a credit much inferior to ours and had to pay a great deal more for borrowed money.

Will you tell the Commission, whether or not in your opinion, there would be any reason why this company should have its fair rate of return cut because of the good use that it made of a fair rate of return and should be allowed less rate of return than the Company B under those circumstances? A. I can see no reason why this company's rates should be cut, and on the other hand I can see no reason why the Commission should increase the rate in favor of Company B because it had been improvident in handling its finances.

Q. So that if a rate of return is fixed which is fair for the company under all circumstances surrounding the rate of the company, you think that the company itself is entitled to the benefits and entitled to suffer the benefits of good use and the damages of the bad use that it makes of its fair return? A. It would seem so to me. It would seem to me that it would only be fair for the Commission to assume, in allowing a reasonable rate of return, that the company's property is well managed and that its financing is prudently handled.

Q. Now you have had certain hypothesis put to you of this particular company. I don't know whether you know it is a fact, but I will ask you, do you know it is a fact that for several years before 1921, which was a condition not only of this company, but a great majority of utilities in this country, that they were receiving inadequate returns? A. I am sure it was true in the case of a very large number.

Q. Do you know that in the last few years, right up to the present year, there have been very many cases all over the country where the Courts have given utilities relief against inadequate rates imposed by law? A. I know there have been a great many such cases.

Q. And do you not know that in many cases besides this case of this company in 1921 the regulatory bodies, such as the Utility Commissions, have recognized that companies had been receiving inadequate rates and in-

creased their rates, so as to yield a larger return? A. I know that is true, yes.

Q. Assuming therefore that a utility Commission in the neighborhood of 1921 had recognized that a company had been receiving an inadequate rate of return, and had readjusted rates so as to allow the company to get a better return, will you state whether or not the natural result of such action on the part of the Utility Commission would be to improve and to expect to improve the credit of the company? A. That would be the natural result, yes.

Q. Assuming therefore that a Utility Commission had recognized the return to be inadequate, and had raised rates so as to give an adequate return, will you tell the Commission whether, after the company has got the improved credit condition, which is the natural result of getting a fair rate of return, the Commission should thereafter give it any less than a fair rate of return to detract from that condition? A. I don't see why the company should be penalized because its securities have improved in market value and its credit has increased by reason of the fact that it has for a number of years received rates which permitted it to earn a reasonable rate on the fair value of its property.

Q. Now let me turn to another asset what was discussed in cross examination. The testimony in this case indicates that this company expects to get a return of only 7.7% during 1926, having received a return of I think 8.6 in the year 1925.

Will you tell the Commission whether or not the expectation of this company under those circumstances that it will only get 7.7% would have the same financial effect as an order by this Commission that the company should in no effect get more than 7.7%? A. The effect of the order of the Commission would be much more serious of course if the Commission should say that under no conditions shall this company be permitted to earn more than 7.7% or whatever the figure is. That would be very different from the effect of the company putting into effect voluntarily rates which would pro-

duce only 7.7%, because the company is not waiving any rights by so doing.

Q. If the Commission says that the company shall not be allowed at any time to earn more than 7.7%, is there any guarantee involved in that that they are going to get 7.7? A. No guarantee. It's quite possible they would get less.

Q. But they couldn't get more? A. But they couldn't get more.

Q. Now one other aspect, you have been asked about the difference between the new company and an established company. I am coming back to that, but before taking that up I will ask you to consider this company as it is today and assume that instead of buying and selling relatively a few stocks and bonds even though they amount to a million in a particular year, it were proposed to form some new enterprise to take over the entire property of this company and buy it, and suppose that at the present time to use round figures, the Commission has determined the fair value of this company's property, including additions to date, to be one hundred million dollars, what in your opinion would be the lowest rate of return that this property in the case of the new purchaser would be permitted by the Commission to earn on it and which would be sufficient to attract the one hundred million dollars capital to buy that property? A. I should doubt whether you would be able to sell the property or enlist enough capital, one hundred millions of capital to buy the property if the ruling of the Commission were such that even under agreeable operating conditions the company could not earn as much as eight million dollars. I think you would have that much permitted in order to attract the capital to finance the purchase.

Q. At least eight million? A. At least eight million.

Q. Now one other aspect. You have testified to certain hypothesis or rather as to facts as to the need of at least a possibility of earning 8% to interest investors either in buying an existing property or constructing a new one.

Now in either event, even in the case of this company, suppose that investors were to buy this company and proposed to buy it at one hundred million dollars. Or suppose that investors were going to construct the Conowingo property for fifty million, and that we were divorced from the Philadelphia Electric Company; that we had no credit of the Philadelphia Electric Company.

Now suppose in either case that when that purchase is made, either in the existing property or in construction of the new property, that it is understood that the Commission will not allow the purchasers to get more than 8% on the value of the property that they are buying.

Now in that case the maximum that investors could get would be what per cent.? A. The 8%.

Q. And would they have any guarantee that they would get the 8%. A. As a practical matter it might of course be less.

Q. So they take the risk of getting less in the hope of getting 8? A. That's right.

Q. And if you take just one isolated case, if you look at the field and the country as a whole, the situation that would exist would be that in any one company over a period of years, or in a number of companies in a given year, all subject to a maximum of 8%, the average actually received by the investors would be what? Somewhere between zero and 8%, would it not? A. Yes.

Q. So that the mere hope of getting 8% would be a factor which, in the investor's mind, would offset the risk of getting only 2 or 3 or 4 or nothing at all? A. It would if he enlisted his money under such circumstances.

Q. And in your judgment that hope of at least 8% would be necessary to break the counterveiling risks? A. I think so.

Q. Now carrying that one point further and making this assumption; if investors put their money in either now of existing properties with the hope of no assurance of getting a return of 8%, and the risk of getting

nothing at all in the long run, of course a number of those concerns would lose, wouldn't they? A. Some concerns will get much less than 8% of course.

Q. Do you know whether or not there are a substantial number of utilities in this country that, apart from governmental regulation, are able to earn less than 8% return. A. You mean street railway companies?

Q. I mean street railway companies? A. Yes.

Q. There are some gas companies, aren't there? A. I think so.

Q. If that is the situation, that some may lose and some will have a chance to earn a return, if as soon as the fortunate companies establish their 8%, the fact that they are getting it is a reason for cutting it down to seven—— A. It would greatly limit the attractiveness of public utility investment.

Q. If that distinction that's been suggested would be made between established companies and new companies, if as soon as a company has reached a point where its credit is established, if then it were an established rule that the man who is already in the investment is not to get the fruits of the stability, but is to have his return cut from 8 to 7, wouldn't the real effect be that the thing held out was not 8 but only 7? A. It would, and of course it would greatly depreciate the attractiveness of public utility investments if that were the policy.

RE-CROSS EXAMINATION.

By Mr. Bryan:

Q. Mr. Hoyt, Mr. Markell recalled your attention to the fact that a number of utilities were not making very much money in 1920 and '21; you could carry that back to '18 and '19, couldn't you? A. Yes.

Q. That was principally on account of the increase in expenses brought about by the war? A. Yes.

Q. And the utilities as a whole made a general application to the Commissions for higher rates? A. I think that's true.

Q. In every case they got them. A. I don't know in every case; where they had a good case.

Q. Where they deserved them they got them? A. I think so.

Q. And when the Commission didn't give it to them, they applied to the Courts and they got it anyway? A. You are referring to the Gas & Electric Companies. A good many of the traction companies weren't able to get them.

Q. Do you happen to know in any such cases where such increased rates were given in order to bridge over the emergency created by the war, those rates were given despite the fact that those increases involved a departure from contracts previously made with utilities with certain classes of their customers? A. In some cases I know that's true.

Q. As a matter of history in this case, that's what happened in 1918 here except that the company did not have to apply to this Commission and then to get the increase which it made in its power rates to the deregation of all of its existing power contracts, andd that happened in other places? A. In some places, yes.

Q. An ordinary business concern coukln't do that? A. Probably not.

Q. Wouldn't have the legal right to change anyway? A. Probably not.

Q. So that's one factor that would tend to account why the investor is willing to accept that 8% in utilities, whereas he doesn't care so much for the 30 or 40% in industrials? A. It's a peculiar character in public utilities that in the public interest they can do certain things.

Q. Isn't that a desirability from the investor's standpoint? A. Yes.

Q. When you say that all the investor gets when he puts his money in utility securities is the hope of so much, whatever that return is that he expects, of course that's true legally, but actually in a city like Baltimore

is it not true that if the Commission sees fit to allow the Investor to earn so much as he has in mind, or is earning at the time he buys his security, that actually he is going to get that much so long as the rates stay in effect? A. I don't know exactly what you mean; that he is going to get the present rate of dividend?

Q. What I am getting at is, is not the permission of this Commission in Baltimore City and similar cities of like condition to earn a certain amount almost equivalent to a guarantee of that amount, not legally, but actually? A. No, I wouldn't say so.

Q. Couldn't this company earn 10% if the Commission allowed it to? A. I don't know whether the traffic would bear that amount or not, but then it wouldn't be guaranteed anyway. Just as you say, when you get back to 1920 and '21, they couldn't get their rates up promptly and many companies had to suspend their dividends and cut off dividends, so it wasn't guaranteed.

Q. That wasn't generally true, was it? A. What wasn't true.

Q. I don't mean the small isolated companies? A. Pretty big ones, People's Gas of Chicago, Union Gas of Brooklyn, a lot of them had to cut off their dividends entirely. There wasn't any guarantees.

Q. There wasn't any Utility Commission in New York to give them prompt relief was there? A. Yes, and the legislature perhaps passed a law to prevent it, but it takes time for the Commissions to act.

Q. What is your idea of the lag that usually takes place between this increased requirement and increased rates? A. A couple of years.

Q. It happens in this case, in 1921, this company made application for an emergency gas rate, and within two months after the petition had been filed they got it.

(Mr. Markell) We had been short for four years though.

(Mr. Wagner) Within the year.

(The Witness) I don't think there is anything that amounts to even a practical guarantee of rates here.

Q. So when you speak of this long lag which sometimes creates an emergency which can't be immediately relieved, the length of that lag depends very largely on the conditions existing in the locality in which it takes place? A. It may be true. In street railways you have a condition where traffic won't bear enough to permit you.

Q. So that if this particular Commission has always acted promptly on such emergency applications, then that feature that you refer to in discussing the lag isn't so important in this jurisdiction, is it? A. No, not if you can always call on the Commission for prompt action, it isn't as important. Then your hazard is more like the industrial hazard.

Q. Now finally is not the investor concerned not so much with the mathematical return and the theoretical value of the utility property, but on the amount of net earnings which the utility is going to have in relation to its requirements for expenses, fixed charges, dividends and surplus; what he looks at is the earnings of the company, isn't it first of all? A. Of course if he is a very large investor, we will say he is going to buy a very substantial interest in this company or in some company, a very substantial interest, he investigates a great deal more than just what are the earnings. A fellow buying one hundred shares, he looks at the earnings, yes.

Q. But certainly the earnings are one of the things he looks at? A. Sure.

Q. And he will make his comparison between the company's requirements and the surplus after that is taken out? A. Surely, and that has a very material bearing.

Q. Therefore in the case of this company, if this Commission should rule in this case that they were going to allow this company enough of a net income to pay its fixed charges, all its dividends, of course I am assuming that the depreciation has been taken out before

you come to fixed charge or dividends, I don't know whether you have assumed that in your testimony, have you or not? A. No I did not.

Q. So therefore when you say that the net earnings should be not less than two and a half times fixed charges, you mean net earnings before depreciation was taken out, did you not? A. No, no. The earnings should be sufficient to produce a return of 8% on the fair value of the property, and then in calculating that 8%, I am figuring that that's the net return after all taxes, expenses of maintenance and whatever may be necessary to reserve for future replacements, etc.

Q. I was asking you about the other comparison you made a while ago when you said that the net earnings ought to be at least two and a half times the fixed charges. Now when that comparison is used in investment circulars, does it mean the net earnings before taking out the provision or charge for depreciation and retirements, or does it mean net earnings after such has been taken out? A. The practices are not uniform. I am afraid in many cases we show the net earnings before depreciation, in other cases we show them after. There is no uniformity in that.

Q. Which one did you have in mind when you spoke of the net earnings being not less than two and a half times the fixed charges? A. A figure after making some allowance included in operating expenses for future retirement.

Q. Is that an afterthought or is that what you really had in mind when you said that? A. I think now of the companies that I have in mind that do that.

Q. But a great many don't? A. A great many don't, that's true. There is no uniformity.

Q. A great many consider, as you said very properly, they regard the net earnings after what is left, after operating expenses are paid and before what is taken out for depreciation? A. Yes.

Q. That money isn't spent, is it? A. No, it's reserved, but it wouldn't make so much difference because the

company might twice after depreciation and another three times before depreciation and they would average out.

Q. But a great many companies would not show over twice after depreciation was taken out? A. That's right.

Q. Assume that this Commission in its right should lay down on which the rate was based in this case that the purpose was to allow the company net earnings sufficient to pay all the fixed charges, to pay all the dividends preferred and common, to make ample allowance for depreciation and other appropriations to reserve, and still to leave the company a substantial surplus from the year's operation, and by substantial, we will say from a million to a million and a half dollars a year after everything is paid, and suppose the Commission, in explaining that rate, said that they also took into consideration the fact that that return was not less than 7 or more than 8%, which is the language practically they used in the 1923 case, would you consider that that rate would tend to injure the company's credits in the sale of its securities in the future? A. It might very well. I don't know whether the dividend paid in cash is a reasonable dividend.

Q. I am talking about equivalent to 10% on the Common Stock? A. That isn't 10% on the capital surplus.

(Mr. Markell) It isn't 10% on the Common Stock. The stock when last issued was $35.00.

(The Chairman) Of course it is not 10% on the Common Stock. The mind of the Commission isn't confused on that issue at all.

Q. 10% on the original Common? A. Oh well, the original Common Stock don't mean nothing.

Q. It does mean something in this case, because what happened was that just about a year ago this company issued four shares of no par stock for each share of its then existing Common Stock with a par value of $100.00. A. Yes, I understand, but what was holder's interest in the building, in the business.

Q. I am talking about the par value, Mr. Hoyt? A.

That means nothing in my opinion; stock is worth more than par or less than par. It's never par.

Q. In your opinion would a rate fixed on that basis injure the credit of this company? A. If the earnings per share, I don't care what the dividends were, if the earnings per share were reasonably satisfactory, a reasonable rate, the earnings per share were a reasonable rate on the value of the stock and then you add your surplus in addition, why possibly that's all the company would need, but you have to get the earnings per share of course.

(Mr. Markell) Mr. Hoyt, what effect would it have on the sale of bonds, if you were to state in the prospectus, or your bond salesmen were to say to you here is a 5% bond offered you at par, and this company has earned this amount of money, and is earning this amount of money at rates fixed as fair and a fair rate of return, but because you are willing to pay the price we ask for this bond, the Commission is going to cut the rate of return because we don't need those earnings any more. A. It would raise a question in the prospective bond buyer's mind, why did the company earn this much last year, why is it going to earn so much less next year.

(Mr. Bryan) Has that statement ever been made in a prospectus that way.

(The Witness) Not in that way, but we have to take it into consideration.

(Examination concluded.)

NOTE: The Commission then adjourned for the purpose of taking a Recess.

(B)

TESTIMONY OF ALLEN G. HOYT AND T. S. BURROUGHS IN THE RAILWAYS VALUATION CASE NO. 533—10TH DAY, MAY, 27, 1925.

AFTER RECESS.

Thereupon—

ALLEN G. HOYT,

a witness of lawful age, produced on behalf of the United Railways & Electric Company, having first been duly sworn according to law, was examined and testified as follows:

DIRECT EXAMINATION.

By Mr. Baetjer:

Q. What is your occupation, Mr. Hoyt? A. I am Vice-President of the National City Company in charge of public utility financing.

Q. The National City Company is engaged in what business? A. In distributing securities, bonds, preferred stocks and notes, etc.

Q. You mean buying and selling? A. Buying and selling.

(Mr. Miles) I am willing to concede the witness' qualifications.

Q. And how long have you been with the National City Company? A. Since 1916.

Q. And prior to that time what was your occupation? A. I was a partner in N. W. Halsey & Co., investment bankers who specialized in public utility financing.

Q. The National City Company is of course one of the largest distributors of the purchasing and selling organizations in the country, is it not? A. It is.

Q. You say you have charge of the public utilities? A. Yes.

Q. That includes, of course, power companies, gas companies, electric companies, street railways, steam railways? A. It does. Steam railroads give a different classification, we don't call that public utility, although it is.

Q. When you use the term "'Public Utilities," you mean power companies, electric companies, gas companies, street railway companies. A. And telephone companies and water companies.

Q. When you say you deal in securities you do not mean merely dealing with securities listed on the stock exchange after they are issued? A. No, sir, we are rather merchants in securities, we buy at wholesale and then we sell at retail.

Q. That is you are a house of issue? A. We are a house of issue.

Q. Buy the entire issue from a company and then distribute or sell them? A. We do sir, yes sir.

Q. Now this business of buying securities from the companies, what is the practice in this respect, with respect to buying an entire issue; payable immediately or to make a contract for the purchase of an issue payable at intervals say of 3, 6, 9 or 12 months. A. We, as far as I am aware, have never entered into an agreement which contemplated the payment of the proceeds of the securities bought at intervals. We always contemplate taking up the securities in the immediate future and passing the proceeds over to the obligor as soon as the securities can be delivered, and we immediately sell the securities as soon as we have purchased them. We begin the offering as quickly after the purchase as we possibly can in order to limit of course our risk against the changes in the money.

Q. In the purchase of issues, original issues by houses of issue, it is the practice, is it not for them to immediately re-sell the securities? A. It is.

Q. You do not hold them for advance in price? A. We do not.

Q. As a matter of fact you frequently sell as much as you can before the final papers are even delivered? A. Yes sir.

Q. As soon as there is any form of understanding? A. Yes sir.

Q. It is the very essence of that business to immediately re-sell? A. It is, sir.

Q. And that is true as to all houses of issue, is it not? A. I think it is, sir.

Q. Now let us assume a case of a street railway company intending to build or acquire a system costing say 10 millions of dollars, assume the construction will take a period of say two years or three years, and that the money will be required at reasonable regular intervals during the three year period, so that so far as the company would be concerned it would be to its interest to make and sell and get the money at intervals of 3 to 6 months, just as it's needed, could securities be sold on those terms? A. I think it would be extremely difficult. The banker buys the securities with the knowledge of the financial conditions as they are at the time. He lays his plans to distribute or sell or market the securities, and he markets the entire amount of the issue as quickly as he can, and the money then is, as I have explained, delivered to the corporation as soon as the securities are delivered. The corporation may find itself temporarily with funds on hand which it may only expend over a period, but as far as I am aware there is no way that that can be avoided.

Suppose some company insisted on making a contract for the sale of securities deliverable and payable over a period of say three years, what effect would that have on the price that a company would obtain for the securities? A. It would make the financing much more expensive. It would cost a very high, it would require a very high fee to the underwriting banker, such a high fee that it would be unreasonable almost I think. It would be very difficult. As far as I know bankers don't enter into con-

tracts of that kind. They can't tell what financial conditions are going to be six months or 12 months or 18 months hence, and they find themselves in a position where they will be compelled to take up securities at a time when there is no market for them, and might be unable to borrow the money on them, might mean bankruptcy for the investing banking house which entered into a contract of that kind. An investment banker would be very reluctant to tenter into any such contract.

NOTE: Question here reread by Stenographer, as follows:

"Q. Suppose some company insisted on making a contract for the sale of securities deliverable and payable over a period of say three years, what effect would that have on the price that a company would obtain for the securities?"

Q. Now as I understand you, an attempt to sell that way would result in a lower price to the company or a higher discount or a premium or a commission to the banker. A. That is true, yes sir, very much greater discount, very much higher cost.

Q. Now let me ask you just a question in that connection a little out of place. I think we probably can all understand this better if we had a little bit better knowledge of the way this business of houses of issue and distribution of securities is conducted.

Let's assume that your company or any other house of issue were to buy 10 millions of dollars of the securities of a street railway company, how would you sell them.

A. We would first, in all likelihood, form what we call a syndicate. We would take the price we paid to the company for the bonds——

Q. (interrupting) Just so we know, a syndicate consisting of whom? A. Consisting of a great many other investment bankers, a large number of investment bankers, the number depending upon the size of the issue.

I say, as we say, we would step up the price and sell them to this syndicate at some advance over the price that we pay. We take the initial committment and we

take some profit for that committment. Then we associate with us a number of other investment dealers, and they in turn each one takes a part of the issue for his own clientele, and then the bonds are sold to the public by us at the retail price; by many others who are in the syndicate at the same price.

Q. Now those are retail houses or distributing houses that assist you in the sale of the bonds or securities. How do they conduct their business of selling; I mean through advertisement or how? A. They may advertise, they may employ salesmen, they may send circulars, and they take the necessary steps for merchandising what they have to sell that retailers do take in order to market their goods. A large part of the securities are sold, whether by us or by these other dealers, by means of personal solicitation on the part of salesmen.

Q. These distributing houses of investment bankers, keep, do they not, very large staffs of salesmen? A. They keep many salesmen.

Q. And a good bit is done by soliciting? A. A very considerable part.

Q. Taking for instance a normal issue of, say railroad securities, of say $10,000,000, have you any idea about in what lots they would be sold to these distributing houses; what the average sale would be to an investor? A. You say railroad.

Q. I mean street railway. A. Street railroad securities would probably——

Q. (interrupting) Or say gas company securities or power company securities; they are more salable aren't they? A. They are easier to sell than street railway securities. We have analyzed many issues, and the average sale we make of public utility bonds may run from $2,500 to $3,500, so a great many sales are necessary we will say in 10 millions of bonds.

Q. The average in your house runs from two to three thousand dollar lots for this type of securities. A. That's true.

Q. Of course that wouldn't apply to farm loan bonds or liberty bonds? A. No sir.

Q. Where you get the large institutions, gas companies and power companies and securities of that type the average would be between two and three thousand dollars. A. 2,500 and 3,500 dollars. It's expensive selling in other words because it don't sell in large blocks on the average.

Q. Now I have assumed a situation in which the railroad made a contract with the bankers in the beginning for the sale of all of these securities deliverable at intervals. Let me change that situation for a moment.

Suppose the same situation of a railroad, say requiring 10 millions of dollars for the purpose of construction of its property, didn't require the bankers to make the committment for the whole $10,000,000 at once, but undertook to sell first say two million dollars, with the expectation of later selling one million more and another time another million or a million and a half until they finally completed that 10 million dollars, would such securities be salable to bankers? A. It might be extremely difficult to sell them when the company attempted to sell its second block, perhaps the markets might be very unfavorable, the 2 million it sold originally might be selling at very low price in spite of what all the investment bankers who had underwritten them might have done to maintain them, and the railroad company might have run into difficulties of one kind or another; it might have had a change we will say in construction costs, and it would have become evident by that time that the cost of completing the project would greatly overrun the original estimate. Many contingencies might arise which would make it well-nigh impossible to sell any more bonds after the initial issue if the company waited.

Q. In all construction programs isn't it the practice for the houses of issue to insist for provision of the full money for the completion of the project before they will take any of it? A. That is practically the universal practice.

Q. They actully require the money to be put up before

they will sell the securities? A. Because perhaps the project would never be completed, and a half completed project is no security at all for the half of the amount put in.

Q. In other words, if a project were to fail in mid-construction it would mean there would be no salvage at all? A. Very little salvage.

Q. So if I understand you then practically for the purpose of financing on construction work of this character it is necessary first that the entire money be provided for before the work is begun in the shape of a contract with the bankers, and that the bankers insist in their contract of selling all of the securities at once and paying for them at once. A. That is true, sir.

Q. Any other alternative is most difficult and at all events expensive? A. That is true, sir.

Q. Turn now to a little different subject. We are dealing here as you know with the question of the United Railways, which is a large system. Without going into the question of the exact amount of money that would be required for the financing, let me ask you this. It is true of course that the larger the issue the more difficult the sale is, assuming that the initial issue is a reasonable amount? In other words, it's more difficult to sell 100 million than 10 million, is it not? A. That's usually the case.

Q. In other words, it's the buyer that gets the advantage of the wholesale price, not the seller? A. That is true.

Q. Let's take for illustration, so we are not confused by too large figures, the unit of $10,000,000; a railroad proposing to construct or proposing to purchase and reconstruct requires $10,000,000 of money. What return, from your judgment and experience, would an enterprise of that kind have to have or be promised in order to enlist the necessary capital? A. I think the capital could not be secured unless those providing it had a reasonable expectation of receiving 8%.

Q. At least 8? Would you think 8 was sufficient in the

case of a street railroad? A. I think it would be difficult to enlist a large amount of capital even on that basis.

Q. For a street railroad? A. For a street railroad.

Q. Suppose you take a power company. A. It would have to be at least 8% even on a power company, and the credit of power companies is much better than that of street railways at the present time.

Q. How about telephone companies? A. I think at least 8% there, and their credit is much better than street railways.

Q. Street railway companies in other words are not at present of either as high credit as power companies and telephone companies? A. They are not.

Q. Was that true January 1, 1924? A. It was.

Q. You say a promise of return of at least 8% is necessary.

Now in order to get that money you would not sell one class of securities, you would sell some bonds, some common stock, perhaps some preferred stock? A. That is true, yes sir.

Q. And the arrangement of your capitalization, that is to say the correct arrangement of your capitalization would considerably influence the cost of the money to you would it not? A. It would sir, yes.

Q. In other words if your balance between your bonds and your common stock, or your bonds, preferred stock and common stock is not correct it means that you don't get the highest credit basis for either class of security? A. That is true, yes sir.

Q. Now taking a situation of that kind, what would you think to be the best arrangement of securities for the purpose of getting the money at the cheapest rate as a whole? A. Probably in the neighborhood of 50 to 60 per cent. in bonds and the balance in common stock, possibly a small amount of preferred, but under existing conditions the difficulties of finding buyers for either preferred or common stock of street railways, I don't think very much advantage would be obtained by the

corporation by having any preferred, but possibly a small amount might make some slight advantage.

Q. But the bonds you think ought to be limited to 50 or 60 per cent. of the total. A. I do.

Q. and that would leave from 40 to 50 per cent. for stock? A. Yes sir.

Q. And that might be divided into preferred and common; you think as a whole it would be better to pick all common? A. Probably would in the initial operation.

Q. Of course, if you have several classes of securities, the larger the equity behind each class the better price you get for it. A. The better price you get for the senior securities.

Q. So that if you tried to get a large senior security for the benefit of getting the lower price, you do two things do you not, you raise the rate on your senior security and you must raise it on your junior security? A. That is true, sir.

Q. Let me put it in a different way. If, for instance, you issue say 50% in bonds and assume you could sell those bonds on a 6 or a 6½% basis, if you made your bond issue 75% you would probably have to pay a higher rate than 6 of 6½ on the entire bond issue, would you not? A. Undoubtedly.

Q. In the same way, if instead of having common stock for 50% you increased your bond issue to about 75, so as to only allow 25 per cent in common stock, it would mean that the security for common stock was just that much more jeopardized and you would still have to pay a higher rate. A. The common stock under those circumstances would be just that much more speculative, because a small decline in the earning power would practically eliminate any dividends on that stock, and it would mean that it would have to sell at a very attractive yield to a buyer to be marketable.

Q. You could make it quite speculative? A. Yes, sir.

Q. Now let's assume the situation which you think is

the best, that is to say, take 60% in bonds, and in the case of the street railways that I have referred to, say a $10,000,000 unit, what would be the interest rate that you think those bonds ought to bear to attract investors? A. In my opinion it would be necessary to sell 6½% bonds at some discount from par to the investor. In other words, a 6¾% basis to the investor.

Q. That is to say that the bonds ought to bear on their face an interest rate of 6½%, and you think that they would have to be sold to the public, however, at some discount so as to make the total yield 6¾%? A. I think so.

Q. And when you mean yield you don't mean not only the annual interest, but also taking into account the depreciation of the bond and the observation of discount at the time of maturity? A. Yes, sir.

(Commissioner Harper) Are you speaking of bonds as a first lien on that property?

(The Witness) Yes, and assuming that this is a new undertaking and the property is bonded to 60% of its value.

(Commissioner Harper) You think those bonds ought to bear such a rate as 6½%?

(The Witness) I think it would be difficult to secure the underwriting under existing conditions for a reasonably large amount of street railway company bonds unless they could be offered to the public to yield in the neighborhood of 6¾%.

(Commissioner Harper) It seems to me that's a rather high rate when the total issue would only amount to 60% of the value. A. Well, we have a good many street railway company bonds, perhaps they are not all first mortgage, but they were I think issued in the underlying bonds only up to 60% of the value, and where the earnings showed a very substantial margin above interest requirements, that are selling in the open market from 6¾ to 7 per cent basis, first mortgage on part of the property perhaps.

Q. Before you leave that subject let me ask you this question. If you, as the house of issue, are selling an entirely new issue of bonds, whether it be an old or a new company, you do not assume to get from the public the price at which those same bonds are expected to sell after they have been seasoned and well placed in the hands of investors? A. That is true.

Q. In other words, he initial sale to the public is less than it is expected they will yield after they have been well placed and after they have become seasoned. A. We are throwing a large block of new bonds on the market, and we must make the price somewhat attractive to have them quickly absorbed.

Q. If you have a bond that goes out and is successful, of course your original investors are always constant customers for more of those same bonds. A. That is true, or for other bonds we might have.

Q. But when a bond is quoted on the Stock Exchange, an outstanding bond, a seasoned bond, that is not an indication of the price at which you can make the initial sale even to the public? A. No, sir.

Q. That is if your banker's calculation is successful, they ought to sell if dealt with on the Stock Exchange at a somewhat higher price than when the wholesale issue is first made to the public. A. If that issue is what we would term a complete success after the distribution is complete, the market ought to find a level somewhat above the original issue price.

Q. As a matter of fact when you make the original issue to your customers you always do it on the belief and representation that it's going to yield them a profit rather than a loss. A. We hope so.

Q. That's the calculation upon which you sell it, that's the caclulation upon which he buys. A. Otherwise why should he buy that as compared to a great many other bonds competing with that issue?

Q. Otherwise he wouldn't buy it at all. A. That's right.

(Commissioner Harper) What are your first 4s yielding at the present time?

(Mr. Baetjer) I think it's about six. What are the 6's selling at, Mr. Miles?

(Mr. Miles) Ninety-five and a half.

(Mr. Baetjer) And they are exchangeable, and if the 6 is selling at ninety five and a half, the 4's exchangeable for them are selling on substantially the same basis.

(Commissioner Harper) A fraction over 6%.

(Mr. Baetjer) Yes, a fraction over 6%.

(The Witness) If I might explain, in regard to this local situation, I think there is a special market for the bonds of the United Railways here, and that they sell at higher figures and lower interest yield than they would sell than if you were to attempt to distribute a very large amount of similar securities and give them national distribution. In other words, we couldn't sell our investors we will will say up in Maine the United Railways' 6's at ninety five. In order to get them to buy them they would have to be on something like a six and three-quarter percent basis, but there is a small amount here, and not a great many local securities available here, and they command what I would say was a somewhat artificial market which wouldn't attract investors if you attempted to give them national distribution on a same yield basis.

(Commissioner Harper) Your answer is based upon the assumption of something happening that is not likely to happen, that is, the reproduction of an entire new Railway System in a city of this size.

(The Witness) Yes, sir, that has no record of earnings and good will established, etc.

Q. That is to say the price at which the United Railways' 4's are selling you don't think would apply to a new issue selling now? A. No.

Q. I asked you to take the case of a ten million dollar company starting, and it was on that you thought the

rate would have to be 6½ and the yield 6¾. A. Yes, on a new enterprise you are assuming.

(Commissioner Harper) I understood you to say if the plant was very much larger they would probably have to pay more.

(Mr. Baetjer) I particularly avoided that question. That's the reason I confined it to a ten million dollar corporation. I think we can carry the railway theory too far; that if we really undertook to show one hundred million dollars we would get 6¾, but it seems to me that's carrying the theoretical thing too far, and I have taken a ten million dollar company which I think is fair.

The other involved so many conjectures that I confess I can't evolve them in my mind.

(Mr. Miles) Mr. Hoyt, I do understand you to testify, however, that in the event of the more or less theoretical reproducing of this Company in this particular city, that it would have the advantage of the particular local conditions that you refer to, would it now, if you financed?

(The Witness) No, I didn't say that exactly. I say that the securities of the existing company, having come out gradually in no very large issue at any one time, and there not being a great many local issues of magnitude surfacing this market, that the people in Baltimore will buy the securities of this Company for one reason and another on a somewhat lower interest basis than you could give them national distribution.

(Mr. Miles) I understand that, but how would the same line of thought effect the reproduction now of this Company?

(The Witness) A new company; it wouldn't have had the record that this Company has had, having paid its fixed charges for years, etc., and furthermore a new company perhaps couldn't raise all the money to reproduce it immediately right in this locality.

(Mr. Baetjer) Mr. Miles, I might say I have avoided that. It wouldn't be difficult to get any banker to say if you undertook to sell fifty million at once you couldn't

do it except at a sacrifice, and it wouldn't throw much light on it. That's carrying the theoretical company too far.

(Mr. Miles) I agree with you, and it's a beautiful illustration of how silly his reproduction really is.

(Mr. Baetjer) I admit that both sides lose a little on that, but the Supreme Court has put it up to us.

The question in my mind, to put as much as one hundred million dollars on the market, you can make all sorts of inferences and it seems to me it would be much fairer to take a small issue of ten million dollars rather than take a problem of one hundred million. I should say that was too much conjecture. Any witness can testity to a ten million dollar issue, because they are doing it all the time. I think we are getting a little the worse of it, but at the same time I am satisfied with it, and that's the reason I have confined it to a ten million dollars proposition instead of one hundred million.

I will discuss with you if you desire whether Justice Braneis is right or the Supreme Court is right.

(Mr. Miles) I agree with you in everything except the statement that you are getting a little the worse of it.

(Mr. Baetjer) If we sell one hundred million we couldn't get as much for them as we did ten million. The wholesale buyers get the benefit of it.

(The Witness) In my figure of a 6¾% basis I am assuming that money to be raised nationally and in no one community where the conditions were especially favorable.

Q. (By Mr. Baetjer) Even ten million dollars? A. Even ten million dollars, yes, sir, and also assuming that this was the early part of last year, too.

Q. Now you said that you think about 60% of it ought to be in bonds bearing 6½% interest and selling to yield approximately 6¾? A. Yes.

Q. Now then the balance you thought could be best

raised by selling common stock with perhaps some preferred? A. Yes.

Q. I am assuming therefore that 40¾ of this ten million dollars is to be raised in common stock. A. 40¾ plus the discount on the bonds would have to be raised by that common stock.

Q. Yes, the discount would have to be taken into account. Without taking the discount for the moment, let's simply take the 40% for even figures for the moment at four million dollars, and if you take in the discount in the bonds, you said four points, or three. A. The discount I think would amount to in the neighborhood of ten points. I think the bankers' spread would amount to in the neighborhood of six points.

Q. I was coming to that later. A. The discount from par? Yes, sir, three or four points.

Q. Without taking into account either the Bankers' spread or the discount, let's assume that four million of dollars is to be raised in common stock; what rate of dividend would that stock have to be expected to bear in order to sell at par or near par? A. I think at least 8% for a street railway common stock.

Q. At least 8%? A. Yes.

Q. In actual dividends? A. In actual dividends to sell at par.

(Commissioner Harper) That's putting 6¾% on 60% and 8% on the 30%.

(The Witness) No, sir, that isn't quite the whole story.

Q. Now even if it paid 8% dividend, would it sell at par if the 8% exhausted the earnings. A. Not unless the 8% was protected by some earning power above that amount for a surplus. There must be surplus available in order that a cushion may be built up to take are of contingencies to protect the Company, or at least the stockholder for some change in conditions, etc.

Q. Let's assume a case where there was no surplus

over the dividend at all, so that a company undertook to distribute its book profits every year in dividends on the common stock, what do you think the result would be on the salable value of the stock? A. I think it would be very much depreciated. A stockholder would be included to believe that the Company couldn't possibly continue paying that rate of dividend very long. He would anticipate either a reduction or passing of the dividend at some future date and not distant future too, and he would take that into consideration in the price he would pay for the stock. He would discount the possibility of having some reduction in the dividend in the price which he would be willing to pay.

(Commissioner Harper) Under the financial set up that you have supposed the Company would have to earn around 9 or 10% rate of return wouldn't it?

(The Witness) Not necessarily sir. It would have to be at least 8%.

Q. The one and a half per cent. saved on the bonds would form some cushion, whether enough or not I don't know, but if it's assumed that 8% is the necessary return, and 60% in bonds yields 6½%, and the other 40% 8%, then of course you have got a safety of 1½% which you save on the bonds which would constitute a surplus. When you undertake to offer stock as a house of issue on the assumption that a Company was going to pay 8% dividends and that 8% distributed in dividends absorbed its entire net earnings, would that stock be salable? A. I don't think it would, sir.

Q. As a matter of fact in selling common stock, can they be sold to an investor without some surplus margin of earnings over their dividends? A. They can't be sold at any reasonable price.

Q. Now, have you in mind the common stocks of any good Street Railroad Systems, and can you tell us at what rate they are selling now and their yield? A. I had occasion to look into that matter, and I went back to January, 1924, inasmuch as you informed me that that was the time, or early in 1924, at which these proceedings were directed and I found that the Twin City Rapid

Transit Company common stocks, a Company serving Minneapolis and St. Paul, were selling at a price where the dividend payments amounted to something over 9% on the market value, and the earnings were something over 10%, because there was some small surplus above the dividend payments.

At the same time, Philadelphia Rapid Transit Company common stock was also selling at a price to yield over 9% with a very small surplus.

There were not many cases that I could find, actual cases that were at all analogous to the one that you have suggested, to this hypothetical case that you have suggested to me. Many street railways in this country are owned or consolidated with Electric Companies, many others are paying no dividends on their common stock, many others are complicated by expiring franchises, etc., and I know of no case where an Issuing House has underwritten the sale of common stock of Street Railways Companies in the last three or four years.

(Mr. Miles) Did you examine what this Company's stock was selling for at the time you made that examination?

(The Witness) I didn't examine it personally, although I was informed it was yielding something like 12%.

(Commissioner Harper) Would your answer to the hypothetical question suggested by Mr. Baetjer be different if the common stock was no par stock rather than par stock?

(The Witness) I don't think that would make very much difference, no sir. The return to the investor I think in the stock would have to be at least 8% and that 8% would have to be protected by a considerable margin of earning power over the amount disbursed in dividends.

Q. So that in order to sell common stock advantageously the Company must have earnings enough not only to distribute the dividend on that stock, but it must also have sufficient earnings so that there is a surplus, at

lease a book surplus, after the payment of the dividend? A. That is true sir.

Q. Otherwise the stock gets to be very speculative, does it not? A. It does.

Q. It is in fact better, is it not to pay what might be the normal dividend rate on the common stocks, let's say even 7%, and put aside three or four per cent. to reserve rather than to undertake to pay say 9% straight out as a dividend without any reserve? A. I think the stock paying 7 would perhaps sell better than the stock paying 9.

Q. That's correct. In other words, this reserve that is calculated is absolutely necessary to insure the investor of the permanency of his dividend? A. It is, sir.

Q. Coming again to the excess over the actual dividend or surplus, could you state from your experience what finally becomes of that surplus, whether the stockholders ever get it? A. The surplus is invested in properties, various purposes of the Company. Some of it may be absorbed in discounts on securities. It isn't kept in cash, it isn't kept in marketable securities, it's absorbed in the operation of the property, and if over the course of a great many years there is some surplus that is invested in such a way that it may become productive it may help the stockholders, but as a matter of fact a Company never has, as far as I am aware a Public Utility Company, in its treasury in cash an amount equal to its book surplus which it might distribute as a special dividend. It isn't there in that form.

Q. Now this book surplus, resulting from say book earnings of 8%, and a distribution of a little less than that in the shape of interest and dividends, is of course also the surplus to which the Company is obliged to charge the expense which it can't charge to operation and which it can't capitalize, isn't it? A. That's true, sir.

Q. Suppose for instance you have a fire in which you have a mere question of restoration, take the Baltimore fire, and you have accumulated a surplus, or suppose you

have a situation as the beginning of the war when the cost of operation went up much faster than it was possible to get the rates up, those losses have to be set off against the surplus, do they not? A. They do, sir.

Q. In other words every contingency that is not provided for either by capital expenditure or by maintenance has to be charged against this surplus, does it not? A. I think that's true.

Q. I am coming now to the question of these book surpluses and book reserves. I want to ask you, in your experience with Public Service Companies, whether those surpluses in Public Service Companies are real surpluses in the sense that they can be distributed to stockholders.

NOTE: Question here re-read by stenographer.

A. They are not held in such form, the surplus is not in such form, it is not in cash ordinarily in such a character of asset that you could disburse it. It's absorbed in the property and in one form or another.

Q. It might of course be invested in property which in turn would help to yield a larger return, might it not? A. That's true.

Q. And in that way increase the total value of the earning property and finally increase the distributable earnings? A. That is true, sir.

Q. If it was large enough. What I meant was, however, in your experience with Public Service Companies, Street Railway Companies particularly, whether that actually happens? A. I don't recall of any such case of a Street Railway, where by reason of having built up a surplus in the form of an additional cash dividend.

Q. What I wanted to get was simply what the attitude of the investor was towards this book surplus and book returns to the public? A. The investor looks at the surplus and the surplus earnings which were above the amount distributed as an evidence of sustained earning power, and that sustained earning power indicates the probability of a continuation of that dividend indefinitely, and that therefore when he sees a surplus on the books of the company, and a surplus earned each year,

he believes that the likelihood of a continuation of that dividend is much greater than it would be if the company were disbursing all that it earned every year.

It's an assurance of a continuation of the rate of dividend at least equal to that he is receiving currently.

Q. And that assurance is necesary is it not in order to get him to buy the stock? A. At a reasonable figure.

Q. Assuming the issue of a preferred stock by a street railway company having outstanding 50 to 60% of its total capitalization in bonds, what would be the dividend rate that that preferred stock would have to bear to sell at par? A. Well, it's a little difficult to find preferred stocks of street railways in the market commanding a favorable figure. I only know of a few instances, very few instances of recent sales of preferred stock of traction companies. The Chicago Rapid Transit Company sold an issue of preferred stock and the dividends were 7.8%. It was a monthly dividend payment, 65% a share per month and they sold that through a customer ownership campaign. It was not underwritten at par.

The Philadelphia Rapid Transit Company sold a very small amount of 7% preferred the same way at par, but none of those were handled and underwritten by bankers who would offer it in competition with other stocks bearing dividends of the same rate or better and having the same protection.

I should think that a stock such as you have assumed in this hypothetical case would have to go to the public or at least a 7½% basis, 7½ to 8.

Q. Taking your experience not merely with Street Railway Companies, but with companies with even better credits, like Power Companies and Electric Light Companies and Telephone Companies, would you say that it would be possible to sell preferred stock less than a 7% preferred stock? A. A very strong Public Utility Gas and Electric Company, might be able to sell its preferred stock at some lower dividend, but this Company that you have assumed even if it was Electric Light and Power I wouldn't assume it could sell a 7% preferred stock at any par.

Q. I am assuming an Electric Light and Power Company that has 50% of say its total capitalization in bonds and 25% in preferred stock and 25% in common stock, and it doesn't earn over what may be said a reasonable return of the whole, could that stock be sold on a better than 7% basis? A. I don't think it could. In fact I don't think the stock would net the Company a 7% basis, because there would be some discounts to come out for distribution.

Q. And such a preferred stock in the situation I have given, also has an equity of 25% behind it represented by common stock? A. Yes.

Q. And you think even with that equity behind it it must be 7% to sell? A. I think so.

Q. As a matter of fact 7% is a mighty high class preferred stock? A. Yes, sir.

(Mr. Miles) I might refer him to the 6½% preferred of the Consolidated Gas Electric Light and Power Co.

(Mr. Baetjer) Of course the Consolidated Gas Electric Light and Power Company has a situation that we can sell too if you let us have those earnings. But we are past that. That's unfortunately past all possibilities of a Street Railway. The Consolidiated was 6½%.

(Mr. Miles) Selling at 109 last night.

(Mr. Baetjer) It sold to the public at what price, Mr. Miles?

(Mr. Miles) You mean when it was brought out, Mr. Baetjer?

(Mr. Baetjer) Yes.

(Mr. Miles) I can't answer that to be frank with you.

(Mr. Baetjer) That's a different thing. That stock was 6½ and that stock sold at par.

Q. (By Mr. Baetjer) Do you know the Consolidated Gas Electric Light and Power Company? A. Only in a general way.

(Mr. Miles) You don't know it well enough to compare it with the United Railways?

(The Witness) I know of course that Company is regarded as a Company of very strong credit and very successful. There are many reasonably successful Public Utilities where the 7% stock are selling at about par or slightly below. There are outstanding cases when even the 6% stock sells at a premium.

Q. Where a stock at 6½% sells at a premium, isn't it true that it is in the case of a Company that has a very large surplus and earnings on the preferred stocks? A. I think that can be assumed.

Q. But I am assuming that a Company has 50% of bonds ahead of it and only 25% behind it of common stock and that makes a big difference in selling value, don't it? A. It does.

Q. You referred a moment ago to the sales of these securities and the bankers' spread. Let's take the discount first, and let's assume you are going to sell 60% first mortgage 6½% bonds and 40% in the common stock.

And assume that under the public regulation to which that Company is subject, the Company is entitled to earn a reasonable return upon its invested capital.

Now what discount did you have in your mind at which it would be necessary to sell those bonds to the public, that is, the retail price? A. Street Railway bonds?

Q. Yes? A. My thought was that these 6½% could be issued to the public at 96%.

Q. And at what price would you think the stock could be issued to the public? A. That's a highly hypothetical question, but I would say that if it paid 8 and earned a surplus, you couldn't expect to get more than par for it, and you couldn't sell it at par to the public unless it paid and earned more. What the discount might be on that common stock that we have assumed I don't know, because I have no direct experience, but my guess is it would be extremely difficult to get it underwritten, and——

Q. No, I mean the price to the public? A. Well, I have assumed an 8% stock at par or the same thing a 7% stock on an 8% basis.

Q. Of course in preferred stock you take account, you take into account only the dividend yield? A. That's true.

Q. No, ammortization in that? A. No.

Q. Now then, assuming that the Railroad to which you have referred undertook to sell these 60% first mortgage bonds and 40% in common stock, and went to bankers to get the money, to get the bankers to market the stock, what discount or profit between the price that the Company was to receive and the price that the public was to buy would the bankers require? In other words what would be the bankers spread, first on bonds and secondly on stock? A. I think on the bonds it may have to be 5 or 6%, particularly as conditions were in January, 1924, or thereabouts; on the preferred stock 7 to 8%, and probably on the common stock in the neighborhood of 10%, although on the common stock it is very difficult to say what would be necessary in order to get that underwritten.

Q. You think so far as the bond is concerned the bankers' spread would be six points? A. It would in fact. I know of instances where that was the case.

Q. Now you said you are sure that was true as of January 1, 1924; it might be a little less now? A. It might be a little less now because the market is better.

Q. That depends very much on the money market and the ease with which the securities are distributed? A. That is true.

Q. Now that 6% spread on bonds you say includes the cost of the bankers' profit, both the bankers that made the original commitment and the syndicate or associates with whom he associates himself, and includes also the expenses for distribution, advertisement and legal and other expenses, does it not? A. It does.

Q. On the common stock, as I understood you to say, you think that even on an 8% common stock the bankers' spread would have to be as much as 7%? A. On the common stock?

Q. Yes? A. At least 10% on the common stock.

Q. At least 10% on the common stock? A. It would be extremely difficult to market it. He would have a great deal of risk, and in order to cover the cost of distribution in the risk incurred I think any banker, if you could find him, who would underwrite a common stock of that kind, would expect to make in the neighborhood of 10%.

(Mr. Miles) You think the Company would want the common stock underwritten that way, Mr. Hoyt?

(The Witness) You are assuming here a new company just being formed?

(Mr. Miles) I am still assuming that.

(The Witness) I don't know how you could be sure of raising this ten million dollars unless you did have it underwritten.

(Mr. Miles) All right, sir.

Q. Now, I think probably counsel has in his mind that probably you would have a house to house campaign and sell it to the public? A. Yes.

(Mr. Miles) No, I haven't anything in my mind.

(Mr. Baetjer) That's been a pretty hard job.

(Mr. Miles) I have in mind it would probably be done the same way as it was done in 1899.

(Mr. Baetjer) I am very glad to hear you say that that's the right way.

(Mr. Miles) I haven't said that.

(Mr. Baetjer) And I haven't any doubt, as much as it has been criticised, it's a very economical way to get money. Still we have to assume that all stock is going to be issued under the rules and regulations of the public service law, which of course means that it must not be issued as a bonus with other securities, but that it must be sold, and in that event I understood you to say that it certainly would be a difficult task to sell common stock.

(The Witness) It would.

Q. (By Mr. Baetjer) It is a difficult task to sell com-

mon stock at any time except in a highly successful company with a record of earning power? A. It is. Unless a Company is successful it is hard to sell the common stock, unless the expectations are very great. We have speculative stocks brought out every day where the promises are great, but under regulation——

Q. I am assuming a common stock that has a limited earning power? A. Very difficult.

Q. They are very difficult to sell? A. Yes.

Q. In fact that's one of the unworked out problems of Public Utility financing, is it not? A. Well, I am assuming—of course we sometimes talk about a new corporation. If you have a corporation already in existence, which has a long record of satisfactory dividend payments on its common stock, it can sell more.

Q. Certainly? A. At a reasonable price.

Q. But that stock must not have a limitation on its earnings to get the best price? A. Well, still a Public Utility, Electric Light and Power Company, may have a limitation.

Q. You mean to say that if you have a Company that has been going on for a long while, even a Public Utility Company—— A. With established earning power and a record of success.

Q. With established earning power and a record of successful operations, the payment of dividends and accumulation of surplus behind it, that of course makes it much easier? A. Yes, makes it much easier. Then it can sell its common stock at a reasonable price.

Q. You mean without so large a spread as 10 points? A. Most stocks of that kind are issued first as you know to the existing stockholders, and then the stock is underwritten usually so that the bankers only take that part of the stock which the stockholders do not take.

Now the banker may have as much as 10 points on the stock that he actually has to take up. It depends of course upon the amount subscribed for by the existing stockholders. Sometimes there is a new issue of stock

made by bankers and not offered to the existing stockholders, and the spread to the banker would depend upon the credit of the corporation and the anticipated ease or difficulty in marketing that stock.

CROSS-EXAMINATION.

By Mr. Miles:

Q. Mr. Hoyt, as a matter of fact, because of the fact that in all of your testimony you have had to assume the unlikely situation of reproducing this company as of January 1, 1924, isn't all of your testimony very largely problematical? A. I don't know that it's problematical. It's the best opinion that I can give you from my experience.

Q. Based upon hypothesis?

(Mr. Baetjer) Now I have each time taken a $10,000,000 company so as not to get the reconstruction of this company involved in it.

Q. Mr. Hoyt, is the cost of financing generally construed in financial circles a capital or an interest charge? A. I don't know that you can say that the practice has crystalized. Some believe it's a proper capital charge and others believe it's a proper interest charge. I think if an existing company sells bonds, the interest on the bonds and the amount necessary to amortize the discount at maturity should be charged against operations.

(Mr. Baetjer) In other words, it's both.

Q. But if its a new Company you think it's a capital charge? A. The cost of financing is a broad term. I am not sure what you mean.

Q. Bankers' spread and discount, exactly what you have been testifying about? A. Of course, the cost of financing includes the loss of interest pending the time that the property goes into operation. I think most accountants agree that's a proper capital charge. The discount on the bonds, as I say, I don't think the practice has crystalized.

Q. What is your own opinion as to discount on the

bonds? A. I don't see that the banker should be very much concerned in it. Why does it make very much difference to him?

Q. I don't think it makes a particle of difference to the banker, but it might to the Commission, and I was asking you for the benefit of your views based on your experience? A. I can't answer that.

Q. You mean you can't give me your opinion, Mr. Hoyt? A. Not on the new undertaking of a construction proposition. I have already answered on an existing Company.

(Mr. Baetjer) I don't think we differ, Mr. Miles, as I understand it. The bankers' spread is capital, the discount is originally capital and amortised as against income annually. I think that's a rule of the Commission.

Q. Mr. Hoyt, let's assume that a Street Railway Company is to be built in the City of Baltimore to cost $10,000,000, using the same figure that Mr. Baetjer has used, and that Railway Company came to the National City Company to finance it and underwrite its securities, would you be good enough to tell the Commission just what plan of procedure you would follow in scrutinizing the supposed underwriting of those securities? A. Well, we would probably have our own representative, engineering force, investigate the probabilities of success of the corporation, have our counsel investigate the legality of the franchise, etc., and then we would consider the general market and the possibility of selling the securities, and what in our opinion was the price at which they could be sold. Having satisfied ourselves on all those points we would begin the formation of a syndicate.

Q. Then it's true that probably the first investigation you would make would be from an engineering viewpoint would you not? A. We would have our engineers—we wouldn't make a detailed engineering investigation, but we would ask our engineers to make what we would call rather a cursory examination to satisfy ourselves that the bonds up to the amount we proposed were well within the proper limits.

Q. Mr. Hoyt suppose your engineers reported to you that a great many lines of that particular Company parallel one another, and that those lines should be so rerouted as to make more economical the operation of that Company, would you require those changes to be made before you underwrote those bonds? A. It would effect our judgment as to the probable success of the Company.

Q. It would effect your judgment, and if your engineer told you that was the case, you would require that it be rerouted or you would not underwrite the bonds? A. That would be an operating detail that perhaps might or might not. If what you say was the case why it might mean to us that we wouldn't be quite so keen for the business, that's all.

Q. And if you did accept it it would at least effect the discount that you would charge, would it not? A. It might.

Q. Mr. Hoyt, when you talk about reproducing a company, let's take the case of Tokio, wouldn't there be some difference in the charges and cost of financing a new Street Railway Company there now in place of the old Company as it existed than if it was the first Street Railway Company that was ever built there? A. Well, it would make some difference. Of course, you assume Tokio as the city which has had a great disaster, etc., and is it to be a prominent city of the same size as formerly or not. You would have to take that into consideration.

Q. Let's assume we are going to design, build a new system in Baltimore, there isn't one here now, but had one in the past, would that effect the cost of the financing of the project? A. You mean would you take into consideration the record of the former Company here?

Q. Yes, the custom of the people? A. It probably would.

Q. Mr. Hoyt, if your Engineering Department made an appraisal of such an application as I referred to a while ago would they consider the matter of overheads and profits that had been charged for the construction

and tracks and other integral parts of the system? A. Our engineers would probably take into consideration what they believed to be reasonable overheads of all kinds when they made their appraisal.

Q. And of course if those overheads were not reasonable that would effect the willingness with which you went into the project? A. Our engineers would estimate the value of the property and in reaching that estimate they would assume certain overheads, what the existing ones were, or whether they were excessive or not. They probably wouldn't go into them but only arrive at a fair figure themselves.

(Mr. Miles) That's all.

(Examination concluded.)

Thereupon—

FRED. S. BURROUGHS,

a witness of lawful age produced on behalf of the United Railways and Electric Company having first been duly sworn according to law, was examined and testified as follows:

DIRECT EXAMINATION.

By Mr. Baetjer:

Q. Mr. Burroughs, you have heard the questions and answers of Mr. Hoyt who has just been examined, and I won't go into quite the same details, but I am speaking generally with respect to the same subject that I spoke to Mr. Hoyt.

Before I do that——

(Mr. Miles) I admit he is qualified.

Q. What is your present occupation? A. I am with Harris, Forbes and Company.

Q. Of New York? A. New York, yes, sir.

Q. Harris-Forbes and Company are in what business? A. Investment bonds.

Q. They are investment bankers? A. Yes, dealers in investment bonds, buying at wholesale and distributing.

(Mr. Miles) What position do you hold?

(The Witness) I am at the head of the Department of Investigations and Reports.

(Mr. Miles) Which means what?

(The Witness) Investigating enterprises that we are asked to finance and reporting on the desirability of those enterprises as a basis for the issuance of bonds.

Q. How long have you been with Harris-Forbes and Company? A. About ten years, nine and a half, I think, to be exact.

Q. What was your occupation before that? A. I was a consulting engineer for a year or two and specializing in public utility work, immediately before that, for about five years, I was chief engineer of the Public Service Commission of Washington, and before that I was with various public utilities and railroads doing engineering work.

Q. The last ten years has been, however, with Harris, Forbes and Company? A. Yes, sir.

Q. Investment bankers? A. Yes, sir.

Q. When you said that you were an engineer for the Washington Public Service Commission you meant the Public Service Commission of the State of Washington and not the City of Washington? A. Yes, sir.

Q. Now, assuming that a Street Railway was about to engage in the purchase and reconstruction, or in the original construction of a Street Railway System to cost $10,000,000 and it sought the assistance of bankers to secure the funds, and assuming also that it would require from say two to four years to complete that system, would it be possible for such a Company to sell its bonds or other securities to the bankers, delivery in payment to be made at intervals as the construction progressed, or would it be necessary to sell all of the bonds and have the money available before the construction commenced,

and give me the reasons for your answer? A. Well, it would be necessary to sell all of the securities in advance and to have sufficient funds in hand to insure the completion of the enterprise, at least to a point where it was self sustaining. I don't mean that if you had this Railway that you would have to build the whole business at the start, but you would have to build enough so that it would be a self-supporting enterprise.

Q. In other words you would have to have enough money provided so that if the enterprise failed when that money was exhausted you had a complete operating unit. A. Yes sir.

Q. Which would mean of course in the case of a Railway sub stations, power houses, car barns, and the complete equipment of the Railway. A. Yes.

Q. Of course a Railway can't be constructed that way can it without considerable waste? A. No, certainly not.

Q. In other words, if you were building a Railway Company with say one hundred miles of mileage, you would have a certain lay out in power houses and sub stations and car barns and other things for the entire system. A. Yes sir.

Q. You wouldn't have a stretch of twenty-five miles with its own substations, power houses and car barns and other things. A. No sir.

Q. So that substantially when you are dealing with a street railway system it means that you have the entire money for the completion of the system provided for in advance. A. Yes sir.

(Mr. Miles) We admit that.

Q. Now assuming again the same street railway situation, that is to say, a Railway Company purchasing and proposing to reconstruct or proposing to originally construct a street railway system and having a capital of $10,000,000 and seeking funds for that purpose by the sale of its capital securities, what return would it be necessary for that Company to have in order to attract the necessary capital. A. Well it would have to have a

reasonable opportunity of earning at least 8% on the money invested.

Q. You say at least 8%. A. Yes sir.

Q. Suppose you take the case of a Power Company, what would its return have to be? A. I think 8% is, taking the hazards of Public Utility business into consideration, I think 8% average rate of return on the capital employed would be the minimum that would attract the necessary amount of capital to construct the property.

Q. What is the credit rating of Street Railways with respect to Power Companies and Telephone Companies, is it higher or lower? A. Of course all street railway securities are not at all in public favor at the present time. They are the most difficult securities to sell.

Q. That is as compared with other public utilities. A. With any other class of public utilities.

Q. And you say in your judgment the rate would have to be 8%. A. No, I say——

Q. At least 8%. A. Yes, it would have to be at least 8%.

Q. Now in obtaining the money for such an enterprise, the total cost of the money depends somewhat on the proper arrangement of your capital, the division into bonds, preferred stock and common stock, does it not? A. Yes sir.

Q. Now what would be the arrangement of capital that would secure for the Company the money at the cheapest rate as a whole, approximately. A. Assuming that the enterprise could be financed at the time we are talking of, I think the best arrangement would be to have about 60% of the funds provided from the sale of bonds, or rather to say bonds issued in a par amount equivalent to 60% of the cost of the enterprise and raise the balance through the sale of stock.

Q. Common or preferred. A. Well in a new enterprise it would be practically impossible to sell common stock to the public in the same sense that you sell bonds. Prob-

ably you would have to form some sort of a group to carry part of them. You might sell a small amount of preferred and the group carry the common for some time until the earning power of the enterprise had been proven, but I doubt very much if any public utility enterprise, even an Electric Light and Power Company could raise 100% of its capital requirement through the sale of securities to the Public. By the public I mean the same class of investor or the same type that you would sell bonds to. There would have to be a somewhat smaller group who could familiarize themselves with the enterprise and who would be willing to take a chance on the property proving a success.

Q. In other words that would be a group of capitalists, wouldn't it. A. Yes.

Q. Now taking the illustration with which you started what rate of interest would be the most economical and the best way to make those bonds bear. A. Well it's a little hard to say what a construction bond of a street Railway could be sold at, because even the bonds of Established Street Railways would have to be 6½'s at a discount. That is, if you would sell an issue of bonds today on a Street Railway that was a going concern you would have to sell 6½'s at a discount, and a Construction Enterprise presumably would have to have some added attraction over and above that.

Q. Let's assume it would be the basis of a construction concern. A. That would certainly pay the least.

Q. If it were a going concern the bonds would have to be 6½%. A. Yes sir.

Q. They would of course be first mortgage bonds you understand. A. Yes.

Q. And you think they would have to be 6½% to sell to the public at what price? A. Oh 96 or 97. It depends somewhat on the price of a bond.

Q. The interest rate you think therefore would be you say 6½%. Now assuming that you would issue some preferred stock, let's assume that you would issue 25% in preferred stock. A. Yes sir.

Q. Making 75% in all. What rate of dividend would that preferred stock have to bear to be salable to the public at about par. A. A Street Railway preferred would have to be oh at least 7½, probably more nearly 8.

Q. 7½ to 8%. A. Yes.

Q. Now what amount would it be necessary to give the common holders the prospect of obtaining in order to enlist this group of people to buy the common stock at about par. A. Well they would be taking all of the risk. Certainly they wouldn't come in for 8%. They would have to have in my opinion a prospect of making more than 8%, but under the most favorable conditions they would have to be assured of being able to distribute 8 year in and year out, and in order to be reasonably assured of being able to distribute that they would have to have a considerable margin of earnings over and above the dividend requirement.

Q. Now when you say assured of 8%, you don't of course mean anything like a guarantee? A. Oh no no, but I mean a Public Utility Enterprise you can't calculate the year's earnings to an exact nicety, and there are unforseen contingencies such as various interruptions of traffic, epidemics that interfere with traffic or strikes. There are many things, and if you even had a rate that under average conditions would assure you of a given earning, there are some years it's going to be a little less and some years more, and there is always the possibility of something happening that will make it very much less. So you would have to have an average earning substantially in excess of the dividend requirement.

Q. The only mention of assurance, you mean it must be their judgment or belief based on an investigation that they would be able to have a dividend of 8%. A. Yes.

Q. And not a guarantee. A. And they would have to earn more than the amount they would distribute.

Q. Now in order to sell the securities of a company of that kind, you would have to have, in addition to the earnings, you would have to have earnings sufficient not only to provide for the interest and the dividend actually

distributed, but something in addition, would you not? A. Yes sir. Each class of security will have to show its requirement earned with a substantial margin. For instance your bonds ought to show their interest earned from 1¾ to twice or better, the preferred stock ought to show the earnings after bond interest sufficient to pay the preferred stock dividend 1½ to two times. Now the common stock must also have some margin over and above the dividend requirement.

Q. In other words, this surplus or assurance of safety applies to each class of securities, does it not? A. Oh absolutely, yes.

Q. The bond holding investor requires earnings you say twice as much as the bond interest. A. Yes.

Q. Of course he gets no benefit in that except the security. Now then the preferred stock holder invtestor wants at the same time sufficient earnings to show not only his actual dividends but a surplus beyond that dividend. A. Yes sir.

Q. And the preferred stock holder probably requires less than the bond holder. A. Yes, because he gets a higher rate of return. Each time as you take a lower return on your money, you demand a higher margin of protection.

Q. Or put it the other way, the less protection and security, the higher the return demanded. A. Absolutely, yes sir.

Q. So not only does the preferred stock holder require a surplus over and above dividends, but the common stock holder requires a surplus over and above dividends. A. Oh yes, sure.

Q. Or a prospect of a surplus above the dividend. A. Yes, he has to have the opportunity to create it if he is successful in his operations. He wouldn't go into it if he were prohibited from establishing such a surplus.

Q. If you take the calculation as to what has to be made on the bonds and preferred stock and common stock, plus the surplus, I think you will find it is over 8% the way you have calculated it. A. Yes.

Q. So that when you say it has to be at least 8% you still mean that must be the minimum do you? A. Yes sir.

(Commissioner Harper) That's interest alone, isn't it?

(Mr. Batejer) Oh no no, interest is the return. Interest on his bond is 6½, and his preferred stock ought to be between 7 and 8, and his common stock 8. Of course if you take an 8% return on the entire capitalization, all you save on the bonds goes to help the surplus on the common stock.

(Commissioner Harper) But the interest rates that he has suggested result in about seven and one-quarter per cent., doesn't it?

(Mr. Baetjer) On the total?

(Commissioner Harper) Yes.

(Mr. Baetjer) No, over 8.

(Commissioner Harper) 6½ on six million——

(Mr. Baetjer) I am adding to that the surplus necessary over and above the common stock dividend.

(Commissioner Harper) Oh yes.

(Mr. Baetjer) In other words, taking into account—the way they always calculate is that you take 8% on the entire capitalization, that enables you to use the difference between the interest rate on the bonds and the interest rate on the preferred stock for the purpose of crating the surplus over and above the dividend rate on the common stock.

Q. (By Mr. Baetjer) Now coming back to that same question, can you tell us if a Company undertakes to distribute all of its earnings in the case of interest on its bonds, dividend on its preferred stock and dividend on its common stock, what effect does that have on the selling value of the common stock and the preferred stock? A. The market for those would be very much impaired, because the public wouldn't feel that there was any assurance of a continuity of that dividend rate, and they

wouldn't feel that there was the normal amount that could reasonably be distributed.

Q. Now can you tell me generally just what the attitude of investors in the purchase of securities is towards these book returns or book surpluses on Public Service Utilities? A. From what standpoint; as to their being available for distribution?

Q. No, as to whether or not they are required for the purpose of inducing investment. A. Oh yes, they are absolutely required.

Q. In other words, investors have an experience with a number of securities, and they know those that have advanced and those that have declined and the reason for it? A. Well the interest and dividend requirements that I have outlined are on the assumption that there would be an adequate surplus in addition. If these interest charges and dividends charges that I have just outlined were only barely earned, the securities would sell at a proportionately greater discount. In order to get the money at the rates I have mentioned you would have to have a reasonable surplus in addition for the purpose of protecting the continuity of those payments.

Q. Now you referred to the bankers' spread or the bankers' profits. Assuming again the condition I mentioned a while ago of a Street Railway Company purchasing and proposing to reconstruct or building for the first time a Railway System costing $10,000,000 and proposing to sell say 60% of bonds, say 25% in preferred stock and the balance in common stock, what would the cost of obtaining that money or the bankers' spread or profits be, first on the bonds and then the preferred stock and then the common? A. Do I understand 60%.

Q. I thought that was the figure you gave. A. I said 60% bonds and 40% stock.

Q. That's correct. A. But I didn't differentiate between common and preferred.

Q. All right then, take the illustration you have actually given, 60% in bonds and 40% in stock. A. Well, while I was waiting I put down the way I thought this

would be. You were talking about an enterprise requiring $10,000,000 in cash. I spoke of 8% return on the average would be required to enlist the necessary capital. That would mean an annual requirement of eight hundred thousand dollars.

Now if bonds were sold to a par amount equal to 60% of the capital cost, I believe that 6½'s could be marketed to the public at a slight discount, probably three or four points that is, at 96 or 97.

In addition there would be the bankers' discount, so that the Company would net about 90.

In other words, instead of the Company raising $6,000,000 from the sale of the bonds, it would realize $5,400,000. That would leave $4,600,000 to be raised from the sale of stock.

Now if it were decided to market a stock preferred, a face rate of 7%, it certainly couldn't be marked at above 90 right at the moment.

Q. You mean a preferred stock. A. Well I took it all at 7. As I said, I don't believe it would be possible to distribute it to the public, but I am assuming that the group who sponsored the enterprise might be induced to take a 7% stock at 90. I am a little skeptical about it, but certainly that's the top limit.

Assuming that they did take a 7% stock at 90, it would mean that to provide $4,600,000 of cash, they would have to sell or take in the aggregate about $5,100,000 of stock.

Now the interest requirement on the 6,000,000 of bonds would be $390,000 a year and the dividend requirement on the $5,100,000 of stock would be $357,000 a year, which would leave a balance of only $33,000.00 as a surplus over the dividend requirement. Now that's less than 10% of the dividend requirement. In other words, although you have earned your bond interest twice, you have only earned your dividend requirement 1.1 times.

Obviously that is too small a margin of protection, and I say I think the figures are too low. I don't think you could finance on that basis.

Q. The figures that you have just given are given however, on a total 8% return on the entire cost. A. Yes. I think it would work out you would have to sell about one-half of that balance in the form of a preferred stock which might be at 7 or 7½ at 90 or thereabouts, and that the sponsors of the enterprise would have to carry the other 20 or 25% until the earning power of the Company had been proven. I doubt, except at tremendous discounts and tremendous potential rates of return, whether you would be able to sell the final equity to the public at the outset.

CROSS-EXAMINATION.

By Mr. Miles:

Q. Mr. Burroughs, you said something about hazards of Public Utility Companies. What particular hazards of Street Railway Companies have you in mind? A. Inability to earn a return on their investment is the principal one.

Q. That's what you term a hazard. A. That's the most serious hazard I can think of.

Q. What do you think the effect of Commission regulation has been upon the rate of return of Public Utility Securities. A. I don't understand your question.

Q. What do you think the effect of Commission regulation upon Public Utility Companies has been upon the price at which those Companies can finance their securities? Has it tended to make it cheaper to finance securities or not? Is it as speculative a business as it was in other words prior to regulation or Commission control, or whatever you want to term it? A. It depends on the character of that Commission entirely. If a Commission has the right to protect a Company against competition it's beneficial, but in a good many of the states the Commission doesn't have any right to limit competition so you couldn't make a general statement.

Q. But you will agree with this statement; that where a Commission has that right and where the conduct of the Commission has been such as to indicate a desire to

be fair to both the utilities of the public—— A. Then I think the existence of a Commission is beneficial.

Q. Now I understand you to say that you were in charge of the Inspection Department. A. Yes sir, investigation and reports.

Q. You heard me ask Mr. Hoyt to state briefly what the National City Company would do if it received an application to underwrite the securities of a Company that was to build a new street railway system in the city of Baltimore, a $10,000,000 Company as an arbitrary figure.

Will you kindly tell the Commission just what your company would do under the same circumstances? A. We couldn't consider financing a construction enterprise at all. I don't think Mr. Hoyt meant that they would either. I think it was a hypothetical case. We don't finance new construction enterprises except as an adjunct for an extension of an established concern.

Q. So that none of your testimony is based upon any experience of financing such a hypothetical company as has been suggested here. Is that correct? A. No, I have rather given the rates which a Company that had proven its earning power would have to have. At the moment it would be exteremely difficult if not impossible to finance a construction of an extended street railway system.

Q. But because, as Mr. Baetjer has suggested, we are required to consider such a possibility by the courts, assuming therefore that the United Railways and Electric Company came to your Company to underwrite its securities for the construction of a new street railway system in Baltimore, you would of course have an engineering appraisal made of the supposed system would you not? A. You mean an estimate of its cost. If this is a supposed system you couldn't make an appraisal of it. You would have to make an estimate of what it was going to cost.

Q. All right, an estimate. A. Yes sir.

Q. You would do that. A. Yes sir.

Q. If your engineers reported to you in their judg-

ment numerous lines paralleled each other and the routing system was not the most economical to produce the best result, would that have some effect on your company to underwrite its securities. A. No it wouldn't make any difference in the charge that we would make to do it. It might be so bad that if the success of the enterprise was effected we wouldn't undertake it at all. We wouldn't be willing to handle a bond at a figure above just because it was poorer.

Q. I didn't mean to imply that at all. You mean in other words it would have two effects, one it might prevent you from financing it at all, or it might effect the amount of bonds that you had agreed to underwrite. A. If the system was badly laid out, yes.

RE-DIRECT EXAMINATION.

By Mr. Baetjer:

Q. Assuming the Company which I have been describing, that is a Company taking over and reconstructing a system or constructing a system new, and giving it the benefit of considering it as a going concern, and assuming that you were asked to bid on the 6½% bonds that you propose to sell that you have referred to, what would be the Banker's spread or profit. A. About five or six points.

Q. That is to say if you thought they would be sold to the public at the price you suggested, of 97, the net price to the Company would be 92. A. Well 92 would be the top, more nearly 90.

Q. Now then assuming that you sold 25% of preferred stock as you have suggested bearing 7% interest, I don't know whether you have testified as to the price it could be sold to the public at or not. A. I think I did yes.

Q. I think you said 90. A. No, the stock that I was talking about at 90, I was taking then into account——

Q. On the total set up. A. Yes. That was net to the Company. I was assuming a 7½ sell to the public at oh maybe 98, and the banker paying about 90 or a little

less for it. The banker would have to maintain the market for the stock for a considerable time after he had made his first distribution, and he would have to have a considerably wider spread than he would in the case of a bond. Bonds are put away and are not coming back into the market in quite the same degree as stocks are.

Q. By protecting the market you mean if you sold such a preferred stock, you would have to buy all that was offered by dissatisfied holders for some time. A. For quite some time. You would on the bonds too, but the amount in the case of a bond coming back in the market would not be so great as in the case of a stock. Stock is usually sold in the small size, and small holders have unforseen needs for raising money shortly after they bought their stock. In fact on securities the banker's work isn't done when he has sold to the first customer. In order to keep his clientele he must protect the markets of the securities that he distributes, and it's not at all uncommon for bankers within the course of a comparatively short time to have to repurchase and distribute anywhere from 25 to 100% of the original issue.

Q. You mean when you have customers that are not satisfied and have to sell, in order to keep too much from coming on the market at once, you buy it and resell it again until it finally lands in the hands of satisfied investors. A. Yes sir.

(Examination concluded.)

NOTE: At 4 o'clock P. M. the Commission then adjourned until Thursday, May 28, 1925, at 10.30 o'clock P. M.